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Top Executive Compensation
1983 Edition

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Top Executive Compensation
1983 Edition

by Harland Fox

A Research Report from The Conference Board

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Highlights

This report is primarily an analysis of the 1982 compensation of the five highest paid executives in each of 1,155 companies in six major types of business: manufacturing (510 companies), construction (86 companies), gas and electric utilities (92 companies), retail trade (92 companies), commercial banks (127 companies), and insurance (148 companies). The major focus is on 1982 total cash compensation and its two elements, base salary and bonus awards. Using this report, a company can compare the 1982 compensation of its top-paid executives with their counterparts in companies of similar size and type of business.

Compensation Changes

Compared to 1981, 1982 total compensation (which includes bonus awards) was about the same in manufacturing; up by 3 percent in construction, by 7 percent in retail trade, by 9 percent in insurance, and by 10 percent in banks and utilities.

In manufacturing and construction, the proportion of companies that paid a bonus for 1982 performance was significantly lower than in 1981; and, among companies that did pay a bonus, the size of award (as a percent of salary) was also significantly smaller than in 1981.

In each type of business, 1982 base salaries were higher than in 1981, with an 8 percent increase in construction and retail trade, 9 percent in manufacturing, 10 percent in utilities, banks and insurance. These salary increases are at a much lower rate than in previous years; during 1980 and 1981, salaries increased 12 to 13.5 percent.

Annual Bonus Plans

The increased use of annual bonus plans continues, especially among financial institutions: 70 percent of the banks and 62 percent of the insurance companies now have a plan. Gas and electric utilities, too, have continued to adopt an annual bonus: One-third have a plan. Plans are almost universal in manufacturing where 94 percent have a plan, as do 83 percent of the construction companies, and 72 percent of the retailers.

As in prior years, the size of the typical bonus award, as a percentage of salary, is generally lowest among gas and electric utilities (24 percent for chief executive officers), insurance (27 percent) and banks (28 percent for the CEO). In retail trade, the median bonus award for chief executive officers is 41 percent of base salary; in manufacturing, 45 percent; and in construction, 49 percent. In general, the size of the bonus, as a percent of salary, tends to increase with company size.

Long-term Incentives

A sizable proportion of companies in each type of business have a plan for awards of **restricted stock** to top executives: publicly held construction companies, 39 percent; manufacturers, 27 percent; retail trade, 25 percent; stock insurance companies, 23 percent; commercial banking, 12 percent; and gas and electric utilities, 5 percent. Under a restricted stock plan, a company makes an outright award of shares, which are subject to forfeiture until "earned out" over a stipulated period of continued employment, usually three to five years.

Much of the growth in **long-term performance share-unit plans** has taken place in the last five years, but they still are not very common outside of manufacturing, where one-third of the firms now have a plan. About 15 percent of the banks have a plan; 14 percent of the publicly held construction companies; 12 percent of the retailers and insurance companies; and 5 percent of the gas and electric utilities.

In these plans, top executives are given a contingent award of performance units at the beginning of a performance period; the final value of these awards is determined by how closely specified corporate financial targets are met during this performance period of the next three, four or five years. During 1982, the median payout to 339 executives was the equivalent of 33 percent of salary.

There has been a substantial increase in the proportion of companies with a **stock option** plan since 1980 in each type of business: 80 percent of manufacturers have a plan, 63 percent of the retailers, 61 percent of the publicly held construction companies, 48 percent of the stock insurance companies, 44 percent of the banks, and 20 percent of the gas and electric utilities.

The majority of companies with a plan provide for the grants of "incentive stock options" (ISO's): 76 to 92 percent of the plans use ISO's, depending on the type of business. Among the companies that granted stock options during 1982, close to half granted *both* ISO's and nonqualified options. The nonqualified options, however, were limited to those executives whose award was more than the $100,000 per-year limit on the value of ISO awards in 57 to 80 percent of the companies, depending on the type of business.

The value of stock option grants made in 1982 to the five top-paid executives as a group, on the average, was the equivalent of 40 to 89 percent of base salary, depending on the type of business.

Stock-for-stock exercise (stock swaps) of options are provided for in 35 to 66 percent of ISO plans, depending on the type of business, and in about the same proportion of nonqualified option plans.

Stock appreciation rights (SAR's) are provided by 19 to 42 percent of the ISO plans, depending on the type of business, and in about the same proportion of nonqualified option plans. In both cases, about half of the plans limit SAR's to "insiders"; the other plans provide SAR's to all option recipients.

Why This Report

During the past decade, these Conference Board reports on top executive pay essentially have documented inflation-driven pay increases for senior management. But the severe recession and the solid drop in inflation have changed the compensation environment dramatically. Base salary increases dropped sharply. Many companies paid no bonus for 1982 company performance; many of those that continued the bonus practice cut the payout substantially. In manufacturing, the differential impact of the recession produced industry pay differentials for top executives that have not been apparent for decades.

The next few years promise continued change, designed to adapt to a new environment, in executive compensation programs. To better report on this change, beginning this year, The Conference Board will produce this report as an annual survey. (All earlier studies in this series have been conducted every other year.)

The primary purpose of these reports remains the same, however: to provide a basis for corporate compensation planners to compare company pay and pay-related programs in their company with those of companies of similar size and type of business. By making this an annual survey, The Conference Board expects to monitor more closely the significant developments in top-executive compensation.

As in the past, the usefulness of these reports depends on the cooperation of the 1,000 or more companies that provide information. We sincerely thank them.

JAMES T. MILLS
President

Chapter 1
Introduction and Summary

THIS REPORT IS primarily an analysis of the 1982 compensation of the five highest paid executives in each of the companies described in the accompanying box. The major focus is on the basic elements of 1982 cash compensation: base salary and annual cash bonus awards. Total compensation, base salary, and bonus awards for 1982 are compared with 1981.

The report also describes the incidence of, and trends in, four important elements of the executive compensation package: annual bonus plans, long-term performance plans, stock options (and their associated "stock appreciation rights" and "stock swaps"), and restricted stock. For stock options, the size of option grants during 1982 is shown; and for long-term performance plans, the figure is the size of payouts during 1982.

Total compensation (which includes bonus awards) for 1982 increased over 1981 for top executives in each type of business—except in manufacturing where total compensation was about the same as in 1981. Differences in total compensation depend to a considerable degree on the proportion of companies that pay a bonus from one year to the next. As indicated below, the prevalence of bonus awards decreased significantly among manufacturers and construction companies.

Type of Business	*Total Compensation Average Change, 1981-1982*	*Percent That Paid Bonus*	
		1982	*1981*
Commercial banking....	10%	57%	56%
Gas and electric utilities .	10	20	28
Insurance	9	46	47
Retail trade...........	7	58	58
Construction..........	3	65	73
Manufacturing	0	71	83

In addition, among the manufacturers and construction companies that paid a bonus for 1982, the awards (as a percentage of salary) were significantly lower than 1981 awards. Among banks and utilities, 1982 awards were essentially the same in 1981 and 1982. Among retailers and insurance companies, 1982 awards were slightly smaller than those in 1981.

About the Companies

This study is based on information obtained from 1,155 companies in six major types of business. These companies represent only specific segments of their respective types of business, however.

- The 510 **manufacturers** include 53 percent of the manufacturers in the 1982 *Fortune* list of 1,000 industrials.
- The 92 **gas and electric utilities** are 79 percent of all gas and electric utilities whose securities are listed on the New York Stock Exchange.
- The 92 **retailers** include 25 percent of approximately all retailers with sales of $50 million or more.
- The 227 **commercial banks** are 51 percent of approximately all commercial banks with total deposits of $300 million or more.
- The 148 **insurance companies** are 46 percent of approximately all life insurance and property and casualty insurance companies with total premium income of $50 million or more.
- The 86 **construction companies** represent 43 percent of the 200 largest contractors: 28 are publicly held and 58 do not have stock traded on an organized exchange.

In each type of business, 1982 base salaries were 8 to 10 percent higher than in 1981, as the median increases for chief executive officers below illustrate:

Type of Business	*Number of Companies*	*Salary Increase, 1981-1982*	
		Median	*Middle 50 Percent Range*
Commercial banking....	180	10	7 to 19
Insurance	111	10	1 to 17
Gas and electric utilities .	75	10	7 to 16
Manufacturing	392	9	0 to 15
Retail trade...........	57	8	0 to 15
Construction..........	52	8	0 to 12

In each type of business, the salary increase above is at a significantly lower rate than in previous years. For example, during 1980 and 1981, median salaries increased at a rate of 12 to 13.5 percent in each type of business.

1982 Annual Bonus Awards

The trend to increased use of annual bonus plans during the 1970's has continued during the past few years. Bonus plans are almost universal in manufacturing and construction and have continued to grow in gas and electric utilities, commercial banking, and insurance, as shown below.

	May, 1983		*May, 1980*
Type of Business	*Total Companies*	*Percent with Bonus Plan*	*Percent with Bonus Plan*
Manufacturing . .	510	94%	90%
Construction. . . .	86	83	89
Retail trade	92	72	81
Commercial banking	227	70	55
Insurance	148	62	52
Gas and electric utilities	92	33	13

The bulk of companies with a bonus plan made an award for 1982 performance, but in manufacturing and construction a significantly smaller group paid a bonus than in 1981, as shown below.

		Percent that Paid Bonus	
Type of Business	*Total Plans*	*For 1982*	*For 1981*
Commercial banking	157	83%	82%
Retail trade	66	80	80
Construction	71	79	89
Manufacturing.	477	75	89
Insurance.	92	74	76
Gas and electric utilities	25	72	68

Among the companies that paid a bonus, the size of the award, as a percentage of salary, was lower for 1982 performance than for 1981 in manufacturing, construction and insurance, as illustrated below for chief executive officers:

	Median Award for 1982		
Type of Business	*Number of CEO's*	*Percentage of Salary*	*1981 Median*
Construction	57	49%	57%
Manufacturing	328	45	50
Retail trade	53	41	40
Commercial banking	132	28	28
Insurance	67	27	32
Gas and electric utilities . . .	18	24	30

Among manufacturers, retailers, banks and insurance companies, the bonus awards as a percentage of salary tend to increase as the size of the company increases. (Data were not adequate to check this in construction and utilities.)

Restricted Stock Plans

As shown below, a relatively small group of companies in each major type of business provide for grants of restricted stock. In general, there has been a modest increase in the use of restricted stock during the past three years.[1]

	May, 1983		*May, 1980*
Type of Business	*Total Companies*	*Percent with Restricted Stock*	*Percent with Restricted Stock*
Construction: publicly held	28	39%	30%
Manufacturing	510	27	18
Retail trade	92	25	19
Insurance: stock	71	23	9
Commercial banking. . . .	227	12	7
Gas and electric utilities .	92	5	4

Under a restricted stock plan, a company makes an outright award of shares to participating executives subject to certain restrictions, the most important of which is that shares are subject to forfeiture until they are "earned out" over a stipulated period of continued employment. This vesting period is generally three to five years.[2]

Long-term Performance Plans

In recent years, some companies have adopted executive incentive plans in which the payoff is based on the attainment of specified *long-term* corporate financial performance goals, in contradistinction to the annual bonus plans that are based on a single year's corporate performance. These plans are generally known as performance share, or unit, plans. In these plans, top executives are given a contingent award of company shares or, more commonly, of performance units at the beginning of a performance period. The actual value of the award is determined by how closely specified corporate financial performance objectives (usually growth in earnings per share) are met during the performance period of the next three, four or five years.[3]

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[1] *Top Executive Compensation 1980 Edition*. The Conference Board, Report No. 793, 1980.

[2] Carol Meyers Edelstein, "Long-term Incentives for Management, Part 4: Restricted Stock." *Compensation Review*, First Quarter, 1981, p. 30.

[3] For an analysis of these plans, see Laurence C. Bickford, "Long-term Incentives for Management, Part 6: Performance Attainment Plans." *Compensation Review*, Third Quarter, 1981, p. 18; and Harland Fox, *Executive Incentives: Long-term Performance Share-Unit Plans*. The Conference Board, Research Bulletin No. 132, 1983.

Table 1: Stock Option Plans by Type of Option Provided

Type of Business	Total Stock Option Plans	Both ISO and Nonqualified Number	Both ISO and Nonqualified Percent	ISO only Number	ISO only Percent	Nonqualified Only Number	Nonqualified Only Percent
Manufacturing	406	270	67%	63	16%	73	17%
Construction: publicly held	17	11	65	4	24	2	11
Gas and electric utilities	18	11	61	5	28	2	11
Commercial banking	99	55	56	36	36	18	18
Retail trade	58	29	50	20	34	9	16
Insurance: stock	34	14	41	12	35	8	24

Although the first of these plans was installed in 1971-1972, much of the growth apparently has taken place during the last five years, as illustrated below.[4]

	May, 1983		May, 1978
Type of Business	Total Companies	Percent with Performance Plan	Percent with Performance Plan
Manufacturing	510	33%	15%
Commercial banking	227	15	5
Construction: publicly held	28	14	11
Retail trade	92	12	3
Insurance	148	12	4
Gas and electric utilities	92	5	1

The plans are still not common outside of manufacturing and, in each type of business, they are generally found among the largest companies.

A small group of (73) companies made a payment under this type of plan during 1982 to one or more of their five top-paid executives. (Included are 44 manufacturers, 11 banks, 8 insurance companies, 7 retailers, 2 utilities, and a construction company.) The awards for 340 executives are shown below, converted to a percentage of their 1982 base salary.

Award as Percent of Salary	Executives Number	Executives Percent
200-260%	8	2%
100-199	38	11
80-99	23	7
60-79	30	9
50-59	16	5
40-49	36	11
30-39	45	13
20-29	35	10
10-19	55	16
Less than 10%	54	16
Total	340	100%

The median payment is the equivalent of 33 percent of 1982 salary, with the middle half ranging between 15 and 67 percent of salary.

Stock Option Plans

By 1980, nonqualified stock options plans were, for all practical purposes, the only type of stock option used. The Tax Reform Act of 1976 did not allow new qualified plans to be adopted after May 21, 1976, and, for plans adopted before this, outstanding options had to be exercised before May 21, 1981. Then the Economic Recovery Tax Act (enacted on August 13, 1981) created a new type of statutory option, the "incentive stock option" (ISO).[5]

As the tabulation below illustrates, there has been considerable growth in the adoption of stock option plans since 1980.

	May, 1983			May, 1980
Type of Business	Total Companies	With Stock Option Plan Number	With Stock Option Plan Percent	Percent with Nonqualified Option Plan
Manufacturing	510	406	80%	68%
Retail trade	92	58	63	43
Construction: publicly held	28	17	61	55
Insurance: stock	71	34	48	18
Commercial banking	227	99	44	23
Gas and electric utilities	92	18	20	8

Generally, the majority of companies with a stock option plan provide for the grant of *both* nonqualified options and ISO's (Table 1). Relatively few companies have only an ISO plan and fewer still, only a nonqualified plan.

Among the companies that have a stock option plan, 43 to 66 percent made a regular grant of options during 1982, as shown below:

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[4] *Top Executive Compensation 1978 Edition.* The Conference Board, Report No. 753.

[5] For an analysis of 189 ISO plans, see Harland Fox, *Incentive Stock Option Plans.* The Conference Board, Research Bulletin No. 148, 1983.

Table 2: 1982 Stock Option Grants by Type of Option

Type of Business	Total Stock Option Grants	Type of Option Granted: Both ISO and Nonqualified: Number	Percent	ISO only: Number	Percent	Nonqualified Only: Number	Percent
Manufacturing	268	148	55%	77	29%	43	16%
Retail trade	25	13	52	9	36	3	12
Gas and electric utilities	10	5	50	3	30	2	20
Insurance: stock	15	7	47	8	53	—	—
Commercial banking	50	21	42	18	36	11	22
Construction: publicly held	10	2	20	5	50	3	30

Type of Business	Companies with Stock Option Plan	Granted Options in 1982: Number	Percent
Manufacturing	406	268	66%
Construction: publicly held	17	10	59
Gas and electric utilities	18	10	56
Commercial banking	99	50	51
Insurance: stock	34	15	44
Retail trade	58	25	43

Except among the publicly held construction companies, close to half of the companies in each type of business granted *both* ISO's and nonqualified options during 1982 (Table 2). However, as shown below, in most cases the nonqualified option was given only to those executives who hit the statutory limit on the size of ISO grants (the value of an individual award cannot exceed $100,000 per calendar year).

Type of Business	Granted Both ISO's and Nonqualified Options	Nonqualified Only Above ISO Limit: Number	Percent
Gas and electric utilities	5	4	80%
Manufacturing	148	109	74
Insurance: stock	7	5	72
Retail trade	13	8	62
Commercial banking	21	12	57
Construction: publicly held	2	0	0

Almost 90 percent of the companies that made a regular grant of options during 1982 provided information about the value of the option for one or more of their five top-paid executives. (The value of the option is the number of shares granted multiplied by the market price at the time of grant.) The size of the grants is shown below, converted to a percentage of base salary, for all five top-paid executives combined.

Type of Business	*Number of Executives*	*Size of Grant (Percent of Salary): Median*	*Middle 50 Percent Range*
Insurance: stock	66	89%	33% to 136%
Manufacturing	1,116	79	47 to 133
Gas and electric utilities	45	72	46 to 100
Commercial banking	245	60	38 to 85
Retail trade	92	52	42 to 75
Construction: publicly held	31	40	24 to 79

A substantial proportion of the companies that have ISO plans provide for **stock-for-stock exercise** (stock swaps), as shown below. This arrangement allows options to be exercised with shares of previously purchased company stock in lieu of cash, a procedure that postpones the taxation of any gain on stock already owned.

Type of Business	*Total Plans*	*With Stock Swap: Number*	*Percent*
Manufacturing	333	220	66%
Commercial banking	91	36	40
Retail trade	49	20	41
Insurance: stock	26	9	35
Gas and electric utilities	16	6	38
Construction: publicly held	15	9	60

As indicated below, the proportion of nonqualified option plans that provide for stock swaps is essentially the same as for ISO plans.

Type of Business	*Total Plans*	*With Stock Swap*	
		Number	*Percent*
Manufacturing	343	206	60%
Commercial banking	73	31	42
Retail trade	38	20	53
Insurance: stock	22	7	32
Gas and electric utilities	13	4	31
Construction: publicly held	13	9	69

A substantial proportion of the companies that have ISO plans attach stock appreciation rights (SAR's) to the ISO, as illustrated below. The SAR allows an executive to relinquish the option and receive an amount equal to the appreciation in the stock since the date of grant. The gain is taxed as ordinary income at the time it is received. Under an ISO, an executive could otherwise exercise the option without tax at the time, but the SAR allows the executive to take the gain without borrowing money to take the option.

Type of Business	*Total Plans*	*With SAR*	
		Number	*Percent*
Manufacturing	333	131	39%
Commercial banking	91	38	42
Retail trade	49	15	31
Insurance: stock	26	10	38
Gas and electric utilities	16	3	19
Construction: publicly held	15	6	40

In most plans, the SAR is not given to all ISO recipients; rather, SAR's are limited to options granted to a small group of top executives (essentially, "insiders"). For example, 60 percent of the ISO plans in manufacturing that grant SAR's limit them to the insider group; this is true as well of 55 percent of the banks. (This apparently does not hold in other types of business, but the number of cases on which to judge is small.)

Roughly the same proportion of companies that have nonqualified stock option plans attach SAR's to the options, as shown below.

Type of Business	*Total Plans*	*With SAR*	
		Number	*Percent*
Manufacturing	343	189	55%
Commercial banking	73	31	42
Retail trade	38	15	39
Insurance: stock	22	8	36
Gas and electric utilities	13	4	31
Construction: publicly held	13	6	46

Again, the SAR is not given to all nonqualified option recipients. For example, among the manufacturers, 55 percent of the nonqualified plans with SAR's limit the SAR to a small group of top executives; 42 percent of the banks also limit SAR's to the insider group.

Executive Pay and Company Size

As a rule, top executives in larger companies are paid more than their counterparts in smaller companies. It is generally accepted that this is a cause-and-effect relationship. The chief executive officer of a large company is paid more than a CEO in a small company in part because the job is more difficult and demanding.

In this study, major emphasis is given to this relationship between top executive pay and the size of the company. For example, the total compensation (base salary plus bonus award) of the chief executive officers in each type of business is shown on a chart similar to Exhibit 1 on page 6.

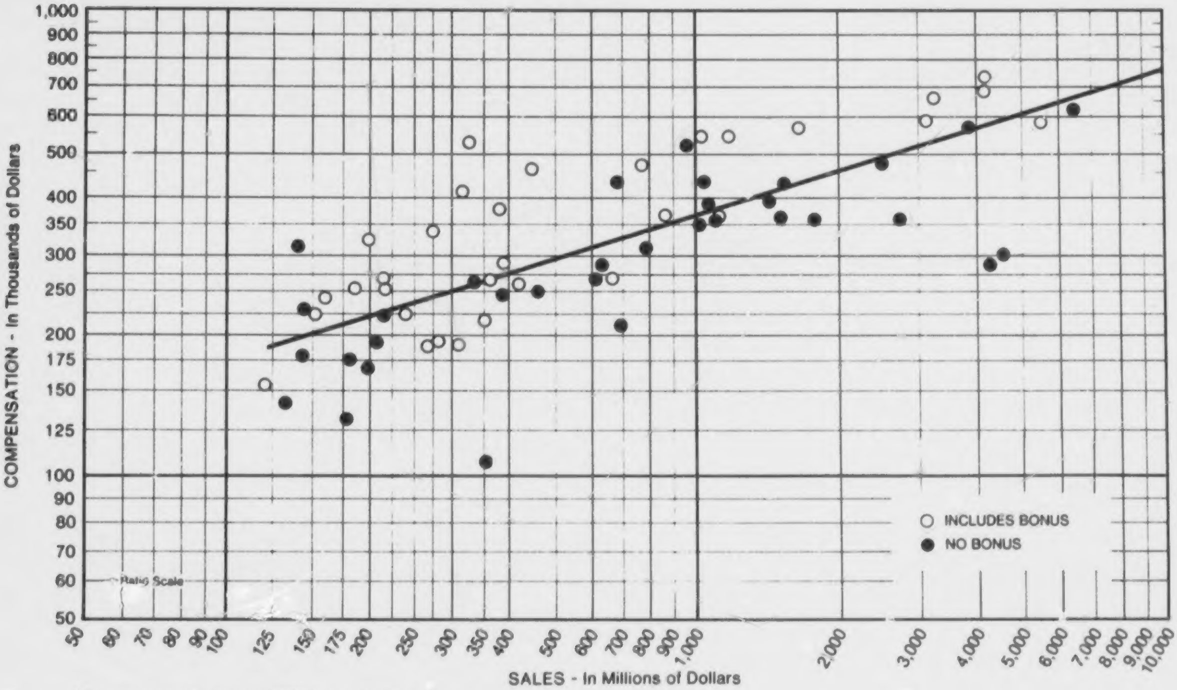
- Each circle on a chart shows the total compensation paid to the chief executive officer by a single company. Those executives whose total compensation includes a bonus award are differentiated by a circle(O).
- The regression line on a chart measures the general relationship between total compensation and company size. The line can be used to determine average compensation of chief executives at any level of company size by taking a direct reading from the chart, or by using the formula given for each line.

For example, the formula for the line in Exhibit 1 is $\log Y = 1.6557 + 0.3025X$, where Y is total compensation (in thousands) and X is sales (in millions). To find average total compensation of chief executives with sales of $500 million, for example, the logarithm of 500 (2.6990) is multiplied by 0.3025, and this product (0.8164) is added to 1.6557 to get the logarithm (2.4721) of Y (compensation) which is 297. Thus, average total compensation for chief executive officers in companies with sales of $500 million is almost $300,000.

Although total compensation and company size are highly related, company size obviously is not the sole determinant of top-executive compensation. To underline this point, the "coefficient of determination" is given for each regression line. This is the ratio of the variation in total compensation explained by the regression line to the total variation in pay. (The square root of this coefficient is the more familiar correlation coefficient.)

As the tabulation below, using pay of the CEO, indicates, this coefficient of determination varies considerably from one type of business to another. For example, for the relatively small construction companies whose stock is not traded, only 15 percent of the variation in total compensation of chief executive officers is accounted for by the variation in company size. But for most types of business, at least half of the variation in chief executive pay, whether total compensation or base salary, is statistically explained by the variations in company size.

Exhibit 1: Compensation of the Chief Executive, by Company Sales



*One company with sales over $10 billion not plotted

	Coefficient of Determination	
Type of Business	*Total Compensation*	*Base Salary*
Gas and electric utilities	70%	69%
Life insurance..............	66	64
Construction: publicly held....	66	52
Commercial banking	65	67
Manufacturing	59	63
Retail trade................	52	55
Property and casualty insurance	42	39
Construction: closely held.....	15	13

It might be noted that the coefficients of determination are generally somewhat higher for the other four executives; that is, their pay is more influenced by company size. Generally, the coefficients are four to 12 percentage points higher than that of the CEO, depending on the type of business, but they are 20 percentage points higher for the closely held construction companies.

Executive Pay Differentials

Although average pay levels for each of the five top-paid executives vary considerably from one type of business to another, the relationships among the pay of the five executives differ very little among the major types of business. For example, the second highest paid executive typically receives 67 to 78 percent of the chief executive's total compensation, as the tabulation below illustrates.

	Median Ratio: Total Compensation as a Percentage of CEO Total Compensation			
Type of Business	*Second highest*	*Third highest*	*Fourth highest*	*Fifth highest*
Retail trade	78%	62%	53%	44%
Construction	72	56	51	46
Manufacturing	71	56	48	44
Commercial banking.....	69	54	47	44
Gas and electric utilities...	68	55	51	46
Insurance	67	56	49	42

Salary ratios among the five top-paid are essentially the same as total compensation ratios, as shown below.

	Median Ratio: Salary as a Percentage of CEO Salary			
Type of Business	*Second highest*	*Third highest*	*Fourth highest*	*Fifth highest*
Retail trade	78%	60%	53%	45%
Construction	74	61	53	49
Manufacturing	72	56	50	45
Commercial banking.....	70	54	48	44
Insurance	68	56	49	44
Gas and electric utilities...	68	56	51	46

Chapter 2
Manufacturing—Summary

INFORMATION ABOUT THE 1982 compensation of their five highest paid executives was obtained from 510 manufacturers, 53 percent of the 966 manufacturers included among the 1982 *Fortune* 1,000 largest industrials. These 510 manufacturers are classified below on the basis of 1982 sales volume.

1982 Sales	*Companies* Number	Percent
$5 billion and over	59	12%
2 - 4,999 billion	83	16
1 - 1,999 billion	70	14
500 - 999 million	90	17
300 - 499 million	73	14
200 - 299 million	60	12
100 - 199 million	75	15
Total	510	100%

Median sales for the group is $689 million, with the middle half ranging between $275 million and $2.3 billion.

Compensation Changes

On the average, total compensation for 1982 (which includes bonus awards) was about the same in 1981 for top executives in these manufacturing industries. For example, in a sample of 392 chief executive officers for whom total compensation for both 1981 and 1982 was available, the median change in total compensation was zero, with the middle half ranging from a cut of 17 percent to an increase of 13 percent.

There is considerable variation, however, in total compensation change among the specific manufacturing industries. For example, total compensation for 1982 was about 5 percent greater than for 1981 in food and electrical machinery but was practically unchanged in stone, clay and glass, industrial chemicals, and transportation equipment. Total 1982 compensation was lower than 1981 total compensation in fabricated metals (−6 percent), paper (−7 percent), machinery (−9 percent), and primary metals (−15 percent).

Much of the drop in 1982 total compensation is the result of fewer manufacturers paying a bonus than in 1981; only 71 percent paid a bonus for 1982 performance compared to 83 percent for 1981. Furthermore, those industries with an appreciable drop in 1982 total compensation also include the largest drop in the number of companies that paid a bonus (see page 10). In addition, 1982 total compensation is off because, among the companies that did pay a bonus, the size of the 1982 awards, as a percentage of salary, was significantly lower than 1981 awards.

Base salaries for 1982 were up 9 percent over 1981, a significant drop in the rate of salary increases. As indicated below, salary increases for the chief executive officer position averaged about 12 percent during 1980 and 1981.[1]

Year	*Number of Companies*	*Percentage Increase in Salary* *Median*	*Middle 50 Percent Range*
1982	392	9%	0% to 15%
1979 - 1981	323	24	16 to 33
1977 - 1979	388	20	10 to 29
1975 - 1977	549	20	11 to 28
1973 - 1975	502	17	5 to 26

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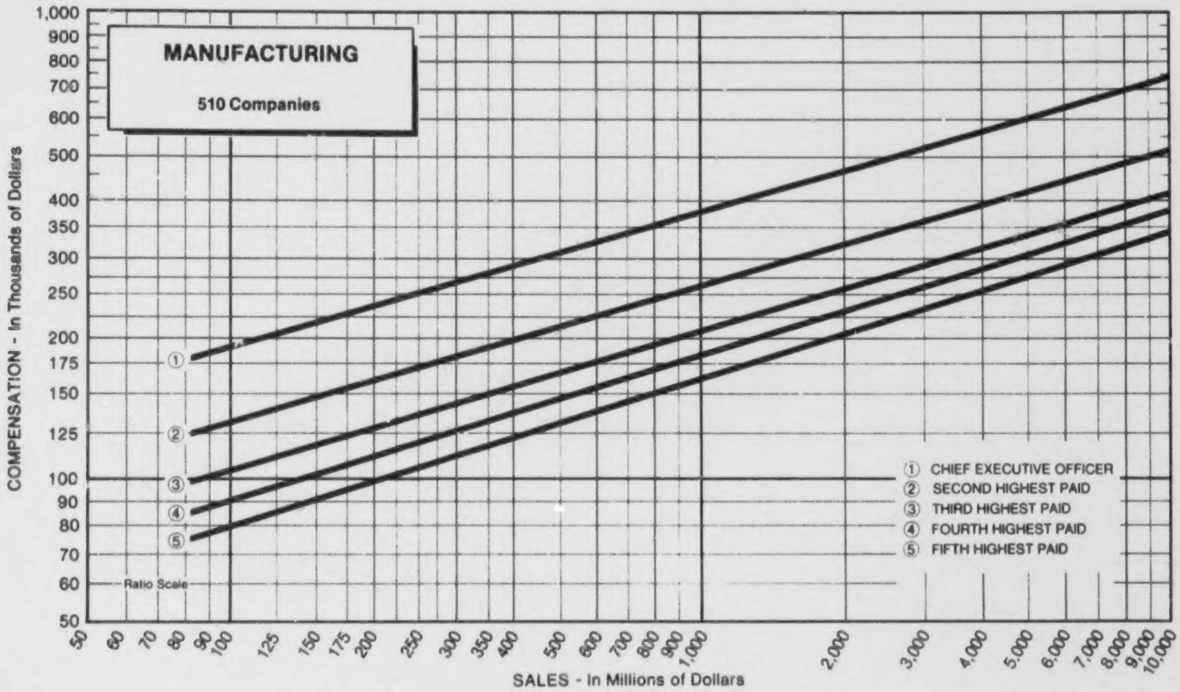
[1] The 1979-1981 changes are from Harland Fox, *Top Executive Compensation 1982 Edition*. The Conference Board, Report No. 827, 1982, p. 11. The 1977-1979 changes are from *Top Executive Compensation 1980 Edition*. The Conference Board, Report No. 793, 1980, p. 14. The 1975-1977 changes are from *Top Executive Compensation 1978 Edition*. The Conference Board, Report No. 753, 1978, p. 18. The 1973-1975 changes are from *Top Executive Compensation 1976 Edition*. The Conference Board, Report. No. 706, 1976, p. 17.

Chart 1: Compensation of the Five Highest Paid Executives, by Company Sales



1982 Total Compensation

For each manufacturer, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The median and middle 50-percent range of the total compensation of the chief executive officers and the other four executives are shown below.

Compensation Rank	*1982 Total Compensation*	
	Median	*Middle 50 Percent Range*
Highest paid	$350,000	$247,000 to $520,000
Second	$249,000	$168,000 to $363,000
Third	$196,000	$133,000 to $282,000
Fourth	$170,000	$119,000 to $241,000
Fifth	$150,000	$104,000 to $215,000

As the lines in Chart 1 suggest, there is a positive relationship between the level of total compensation and sales volume for all five executives. The correlation coefficients for the five lines are, respectively: .77, .79, .81, .82, and .82.

The regression lines on the chart can be used to determine the average compensation of an executive at any level of sales, either by a direct reading from the chart or by using the regression formulas below. (In these formulas, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.)

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7085 + 0.2881 \log X$	59%
Second...........	$\log Y = 1.5271 + 0.2948 \log X$	62
Third............	$\log Y = 1.4235 + 0.2978 \log X$	65
Fourth...........	$\log Y = 1.3462 + 0.3039 \log X$	67
Fifth	$\log Y = 1.2944 + 0.3042 \log X$	67

Although total compensation and sales are highly related, company size is not the sole determinant of compensation level. As the "coefficients of determination" (r^2) above indicate, the variation in sales statistically explains 59 to 67 percent of the variation in total compensation of the five top-paid executives. (This coefficient is the square of the correlation coefficient.)

The tabulation below of the total compensation of chief executive officers indicates that this coefficient of determination varies considerably among the 12 specific industries.

Industry	*Coefficient of Determination (Chief Executive Officers)*
Consumer chemicals	73%
Electrical machinery	69
Food	65
Industrial chemicals	64
Machinery	60
All Manufacturers	**59**
Stone, clay and glass	58
Primary metals	57
Transportation equipment	56
Paper	54
Fabricated metals	52
Printing and publishing	40
Textiles	36

As a rule, the coefficient of determination is higher for the other four executives: The largest coefficient is 6 to 22 percentage points greater than that for the chief executive officer, depending on the industry.

There are substantial differences in the average total compensation of each of the five top-paid executives from one industry to another, even when sales volume is taken into consideration. This is illustrated in the tabulation below, which shows average total compensation of chief executive officers, by industry, at sales of $689 million, the median sales volume for all manufacturers.

Industry	*Total Compensation (Chief Executive Officers)*
Consumer chemicals	$403,000
Printing and publishing	385,000
Electrical machinery	367,000
Industrial chemicals	353,000
Fabricated metals	353,000
Transportation equipment	342,000
Textiles	338,000
All Manufacturers	**336,000**
Food	328,000
Machinery	327,000
Stone, clay and glass	303,000
Primary metals	285,000
Paper	280,000

When sales volume is taken into consideration, these industry differences apparently are growing wider because of the differential impact of the recession. The highest industry average above is 44 percent greater than the lowest; in 1981 this spread was 37 percent. But in 1979, the spread was 24 percent and, if the lowest paying industry is dropped, the 1979 difference was only 10 percent.

The ratio of the total compensation of each executive to that of the CEO is shown below.

Compensation Rank	*Total Compensation as a Percentage of Chief Executive's Total Compensation*	
	Median	*Middle 50 Percent Range*
Second highest	71%	61% to 81%
Third highest	56	48 to 64
Fourth highest	48	41 to 57
Fifth highest	44	37 to 52

1982 Salary

There is also a positive relationship between base salary and sales volume. The regression equations for the five top-paid executives are shown below. (Y is salary stated in *thousands* of dollars; X is sales stated in *millions* of dollars.)

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7379 + 0.2400 \log X$	63%
Second	$\log Y = 1.5579 + 0.2482 \log X$	62
Third	$\log Y = 1.4378 + 0.2563 \log X$	66
Fourth	$\log Y = 1.3703 + 0.2614 \log X$	70
Fifth	$\log Y = 1.3305 + 0.2613 \log X$	68

As the coefficients of determination (r^2) above indicate, the variation in sales volume statistically explains 62 to 70 percent of the variation in base salary.

The coefficient of determination varies considerably for the base salary of CEO's among the 12 specific manufacturing industries:

Industry	*Coefficient of Determination (Chief Executive Officers)*
Primary metals	82%
Electrical machinery	73
Industrial chemicals	72
Consumer chemicals	72
Fabricated metals	70
Food	66
Stone, clay and glass	64
All Manufacturers	**63**
Transportation equipment	62
Machinery	53
Paper	52
Textiles	35
Printing and publishing	28

There is relatively little difference in average base salary of each of the five top-paid executives from one industry to another, when sales volume is taken into consideration. This is illustrated below using the average salary of chief executive officers in each industry at sales of $689 million, the median sales volume of all manufacturers. (These averages are derived from the regression equations for each industry.) The highest average base salary is only 15 percent greater than the lowest.

Industry	*Base Salary (Chief Executive Officers)*
Industrial chemicals	$281,000
Consumer chemicals	278,000
Fabricated metals	277,000
Printing and publishing	275,000
Machinery	270,000
Primary metals	270,000
All Manufacturers	**263,000**
Textiles	261,000
Electrical machinery	259,000
Stone, clay and glass	257,000
Paper	251,000
Food	249,000
Primary metals	242,000

The ratio of the salary of each of the other top-paid executives to the salary of the chief executive officer is shown below.

	Salary as a Percentage of Chief Executive's Salary	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	71%	59% to 80%
Third highest	55	48 to 65
Fourth highest	49	42 to 57
Fifth highest	46	38 to 53

These ratios are practically the same as the total compensation ratios.

1982 Bonus Awards

Almost 94 percent (477) of the 510 manufacturers have an "annual" executive bonus plan; that is, a plan that pays a year-end bonus based on that year's corporate performance. The incidence of these plans varies somewhat from industry to industry, but at least 80 percent of the companies in any manufacturing industry have a plan.

There is no consistent relationship between company size and the prevalence of these plans: Better than 90 percent of the companies at any sales level have a plan.

There has been considerable growth in the prevalence of these plans over the last decade. In 1972, only two thirds of a comparable group of manufacturers reported an annual bonus plan.[2] By 1980, 90 percent did so.[3]

Three-fourths (361) of the 477 manufacturers with a bonus plan made an award for 1982 performance; 89 percent paid a bonus for 1981, however. Among the 361 companies that paid a 1982 bonus, most (343) also paid a 1981 bonus, but 18 did not. Among the 116 companies that paid no bonus for 1982, 80 paid a 1981 bonus; 36 paid no bonus in either year.

By and large, the proportion of companies in the specific manufacturing industries that paid a bonus for 1982 performance is smaller than the percentage that paid a 1981 bonus, as shown below.

	Total With Bonus	*Paid Bonus for 1982*		*Paid Bonus for 1981*
Industry	*Plan*	*Number*	*Percent*	*Percent*
Consumer chemicals	22	21	96%	96%
Printing and publishing	20	18	90	100
Food	42	37	88	88
Electrical machinery	42	33	79	93
Transportation equipment	47	37	79	85
Fabricated metals	23	18	78	96
Industrial chemicals	40	31	78	85
Textiles	24	18	75	79
All Manufacturers	**477**	**361**	**75**	**89**
Stone, clay and glass	22	16	73	82
Machinery	60	41	68	87
Paper	23	15	65	83
Primary metals	29	14	48	90

The median award for 1982 performance for 1,729 executives in the 356 companies that paid a bonus is 37 percent of base salary, with the middle half ranging from 24 to 55 percent of salary. As Table 3 indicates, the median award for CEO's (45 percent of salary) is somewhat higher than that for the other four executives (32 to 39 percent of salary). Compared to bonus awards for 1981, the 1982 medians are 5 to 10 percentage points lower.[4]

For each of the five executives the bonus award as a percentage of salary increases with company size (Table

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[2] *Top Executive Compensation 1972 Edition.* (out of print.) The Conference Board, Report No. 573, 1972, p. 12.

[3] *Top Executive Compensation 1980 Edition,* p. 11.

[4] *Top Executive Compensation 1982 Edition,* p. 12.

Table 3: 1982 Bonus Awards and 1981 Median Bonus

1982 Bonus Award (Percent of Salary)	Chief Executives		Second Highest Paid		Third Highest Paid		Fourth Highest Paid		Fifth Highest Paid	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
100% or more	27	8%	21	6%	19	5%	20	6%	14	4%
90 - 99	8	2	8	2	6	2	3	1	6	2
80 - 89	14	4	10	3	11	3	11	3	3	1
70 - 79	20	6	16	5	16	4	12	3	15	4
60 - 69	32	10	23	7	25	7	16	4	15	4
50 - 59	36	11	44	13	36	10	37	10	27	8
40 - 49	53	17	47	14	49	14	48	13	42	12
30 - 39	48	15	69	20	75	20	59	17	69	20
20 - 29	48	15	49	14	64	18	85	25	74	23
10 - 19	24	7	35	10	43	12	44	12	52	15
Less than 10%	18	5	20	6	18	5	22	6	23	7
Total	328	100%	342	100%	362	100%	357	100%	340	100%
Median Bonus	45%		39%		36%		33%		32%	
Middle 50% Range	28 - 65%		24 - 57%		24 - 55%		24 - 55%		21 - 48%	
Median Salary	$295,000		$195,000		$156,000		$137,000		$126,000	
1981 Median Bonus	**50%**		**48%**		**43%**		**43%**		**40%**	

4, p. 13).[5] Again, the 1982 medians at each size level are 4 to 7 percentage points lower than in 1981.[6]

Restricted Stock Plans

Twenty-seven percent (137) of the manufacturers have a restricted stock plan under which contingent grants of company stock are made, subject to restrictions and forfeitures, until earned out by continued employment over a specified period of time. The use of restricted stock has increased somewhat in the past three years; 18 percent (83) of a comparable group of (470) manufacturers reported a plan in 1980.[7]

The prevalence of these plans is not related to company size, but it varies considerably among the 12 specific manufacturing industries, as shown below.

Industry	*Total Companies*	*With Restricted Stock Plan*	
		Number	*Percent*
Textiles	25	12	48%
Consumer chemicals	23	10	44
Fabricated metals	23	8	35
Industrial chemicals	42	14	33
Transportation equipment	47	15	32
Printing and publishing	25	7	28
All manufacturing	**510**	**137**	**27**
Machinery	66	17	26
Electrical Machinery	43	10	23
Primary metals	30	5	17
Food	47	8	17
Stone, clay and glass	25	4	16
Paper	27	3	11

Long-term Performance Plans

One-third (169) of the 510 manufacturers have an executive incentive plan based on the achievement of long-term corporate financial goals, usually called a **performance share or unit plan.**[8] This compares with only 15 percent of 746 manufacturers that reported a plan in 1978.[9]

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[5] Data are derived from regression equations based on the pay of executives in 356 companies with a bonus plan that paid a bonus. The equations are shown below; the coefficient of determination is in parentheses.

Total Compensation

Highest paid .... $\log Y = 1.7962 + 0.2846 \log X$ (67%)
Second .... $\log Y = 1.6129 + 0.2857 \log X$ (67%)
Third .... $\log Y = 1.4803 + 0.2949 \log X$ (69%)
Fourth .... $\log Y = 1.4161 + 0.2978 \log X$ (72%)
Fifth .... $\log Y = 1.3521 + 0.3034 \log X$ (72%)

Base Salary

Highest paid .... $\log Y = 1.7428 + 0.2437 \log X$ (66%)
Second .... $\log Y = 1.5817 + 0.2424 \log X$ (63%)
Third .... $\log Y = 1.4448 + 0.2553 \log X$ (68%)
Fourth .... $\log Y = 1.3857 + 0.2593 \log X$ (72%)
Fifth .... $\log Y = 1.3410 + 0.2615 \log X$ (71%)

[6] *Top Executive Compensation 1982 Edition*, p. 13.

[7] *Top Executive Compensation 1980 Edition*, p. 14. See also, Carol Meyers Edelstein, "Long-term Incentives for Management, Part 4: Restricted Stock." *Compensation Review*, First Quarter, 1981, p. 30.

[8] For an analysis of these plans, see Laurence C. Bickford, "Long-term Incentive for Management Part 6: Performance Attainment Plans." *Compensation Review*, Third Quarter, 1981, p. 18; and Harland Fox, *Executive Incentives: Long-term Performance Share/Unit Plans*. The Conference Board, Research Bulletin No. 132, 1983.

These plans are most common among larger companies. For example, 53 percent of the manufacturers with $3 billion or more in sales have a plan compared with 35 percent with sales in the $300 million to $3 billion range, and 13 percent of the companies with sales in the $100 million to $300 million range.

The prevalence of these plans also varies considerably among the specific industries, as shown below.

Industry	Total Companies	With Long-term Performance Plan Number	With Long-term Performance Plan Percent
Stone, clay and glass	25	14	56%
Industrial chemicals	42	21	50
Fabricated metals	23	10	44
Textiles	25	11	44
Paper	27	11	41
Consumer chemicals	23	9	39
All manufacturers	**510**	**169**	**33**
Electrical machinery	43	14	33
Machinery	66	20	30
Printing & publishing	25	7	28
Food	47	12	26
Transportation equipment	47	10	21
Primary metals	30	5	17

Forty-four companies made a payment during 1982 to one or more of their five top-paid executives under this plan. The awards for 211 executives are shown below, converted to a percentage of their 1982 base salary.

Award as Percent of Salary	*Executives* Number	*Executives* Percent
200 - 230%	4	2%
100 - 199	28	14
80 - 99	21	10
60 - 79	23	11
40 - 59	26	12
30 - 39	26	12
20 - 29	21	10
10 - 19	32	15
Less than 10	29	14
Total	210	100%

The median award is the equivalent of 38 percent of 1982 salary, with the middle half ranging between 16 and 80 percent of salary.

Stock Option Plans

Almost 80 percent (406) of the 510 manufacturers have a stock option plan.[10] These plans are somewhat more common in the largest companies; 94 percent of the companies with sales of $2 billion or over have a plan compared with 72 percent of companies smaller than this. The incidence of stock option plans varies somewhat among the specific manufacturing industries, but at least 60 percent of the companies in each industry has a plan, as shown below.

Industry	*Total Companies*	*With Stock Option* Number	*With Stock Option* Percent
Electrical machinery	43	41	95%
Transportation equipment	47	41	87
Stone, clay and glass	25	21	84
Fabricated metals	23	19	83
Consumer chemicals	23	19	83
All manufacturers	**510**	**406**	**80**
Primary metals	30	24	80
Machinery	66	53	80
Paper	27	21	78
Industrial chemicals	42	32	76
Printing and publishing	25	18	72
Food	47	31	66
Textiles	25	15	60

Two-thirds (270) of the companies with a plan provide for grants of *both* incentive stock options (ISO's) and nonqualified options; 15 percent (63) grant only ISO's, and 18 percent (73) only nonqualified options.

Two-thirds (268) of the 406 companies with a plan made a regular grant of stock options during 1982. Twenty-nine percent of the companies granted *only* ISO's; 16 percent *only* nonqualified options; and 55 percent granted *both* ISO's and nonqualified options. Among the 148 plans that granted both ISO's and nonqualified options, 109 (74 percent) limited nonqualified options to those executives who hit the $100,000 limit on ISO grants.

Most (230) of the 268 manufacturers that granted options in 1982 provided information about the value of the option for one or more of their five top-paid executives. (The value of an option is the number of shares multiplied by the market price at the time of grant.) The size of the options for 1,116 executives is shown below, converted to a percentage of 1982 base salary.

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[9] *Top Executive Compensation 1978 Edition*, p. 13.

[10] For an analysis of 189 ISO plans, see Harland Fox, *Incentive Stock Option Plans*. The Conference Board, Research Bulletin No. 148, 1983.

Value of Option (Percent of Salary)	*Executives*	
	Number	*Percent*
400% or more	35	3%
300 - 399	34	3
200 - 299	64	6
150 - 199	102	9
100 - 149	186	17
75 - 99	165	15
50 - 74	212	19
25 - 49	237	21
Less than 25%	81	7
Total	1,116	100%

The median value of the option grant for these executives is 79 percent of base salary with the middle half ranging between 47 and 133 percent of salary. The median grant to the chief executive officers (85 percent of salary) and the second highest paid (83 percent) is somewhat higher than that for the third-highest paid (79 percent) and the other two executives (72 percent of salary).

Stock-for-stock exercise (stock swaps) are provided for by 66 percent (220) of the 333 companies that grant ISO's, and by 60 percent (206) of the 343 plans that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by 39 percent (131) of the 333 plans that grant ISO's. Most plans, 60 percent, limit SAR's to a small group of top management (essentially, "insiders"); the other 40 percent grant SAR's to all ISO recipients.

Table 4: 1982 and 1981 Bonus Awards as Percent of Salary, by Company Size

	Sales Volume		
Executive	*$275 Million*	*$730 Million*	*$2.2 Billion*
Chief Executive			
1982 Bonus (%)	42%	48%	55%
Salary	$217,000	$276,000	$361,000
1981 Bonus (%)	49%	54%	61%
Second Highest Paid			
1982 Bonus (%)	37%	43%	50%
Salary	$149,000	$189,000	$246,000
1981 Bonus (%)	44%	50%	56%
Third Highest Paid			
1982 Bonus (%)	35%	41%	47%
Salary	$117,000	$150,000	$199,000
1981 Bonus (%)	41%	46%	52%
Fourth Highest Paid			
1982 Bonus (%)	34%	39%	44%
Salary	$104,000	$134,000	$179,000
1981 Bonus (%)	39%	45%	50%
Fifth Highest Paid			
1982 Bonus (%)	31%	35%	41%
Salary	$95,000	$123,000	$164,000
1981 Bonus (%)	35%	41%	48%

SAR's are provided by 55 percent (189) of the 343 plans that grant nonqualified options. Most plans (58 percent) limit SAR's to a small group of top management; the other 42 percent grant SAR's to all nonqualified option recipients.

Chapter 3

Manufacturing—Individual Industries

Food and Kindred Products

This industry includes manufacturers and processors of food and beverages for human consumption, and related products such as confections, fats and oils, and animal feeds. (SIC: 20)

The Companies

Executive compensation data for this industry were obtained from 47 companies, classified below according to 1982 sales volume. The smallest company had sales of $111 million; the largest $7.5 billion.

1982 Sales	*Number of Companies*	
$5 billion and over	5	Median Sales:
2 - 4,999 billion	9	$719 million
1 - 1,999 billion	6	
500 - 999 million	10	Middle 50 percent:
300 - 499 million	7	$318 million to
200 - 299 million	6	$3.0 billion
100 - 199 million	4	
Total	47	

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 47 companies is plotted in Chart 2. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$341,000	$250,000 to $625,000
Second	240,000	153,000 to 385,000
Third	202,000	105,000 to 317,000
Fourth	162,000	93,000 to 243,000
Fifth	145,000	85,000 to 218,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	69%	55% to 82%
Third highest	53	46 to 62
Fourth highest	47	37 to 53
Fifth highest	42	32 to 47

As the lines on Chart 3 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.4496 + 0.3755 \log X$	65%
Second	$\log Y = 1.2094 + 0.3935 \log X$	66
Third	$\log Y = 1.0441 + 0.4173 \log X$	71
Fourth	$\log Y = 1.0019 + 0.4070 \log X$	70
Fifth	$\log Y = 0.9758 + 0.3990 \log X$	71

Chart 2: Compensation of the Chief Executive, by Company Sales

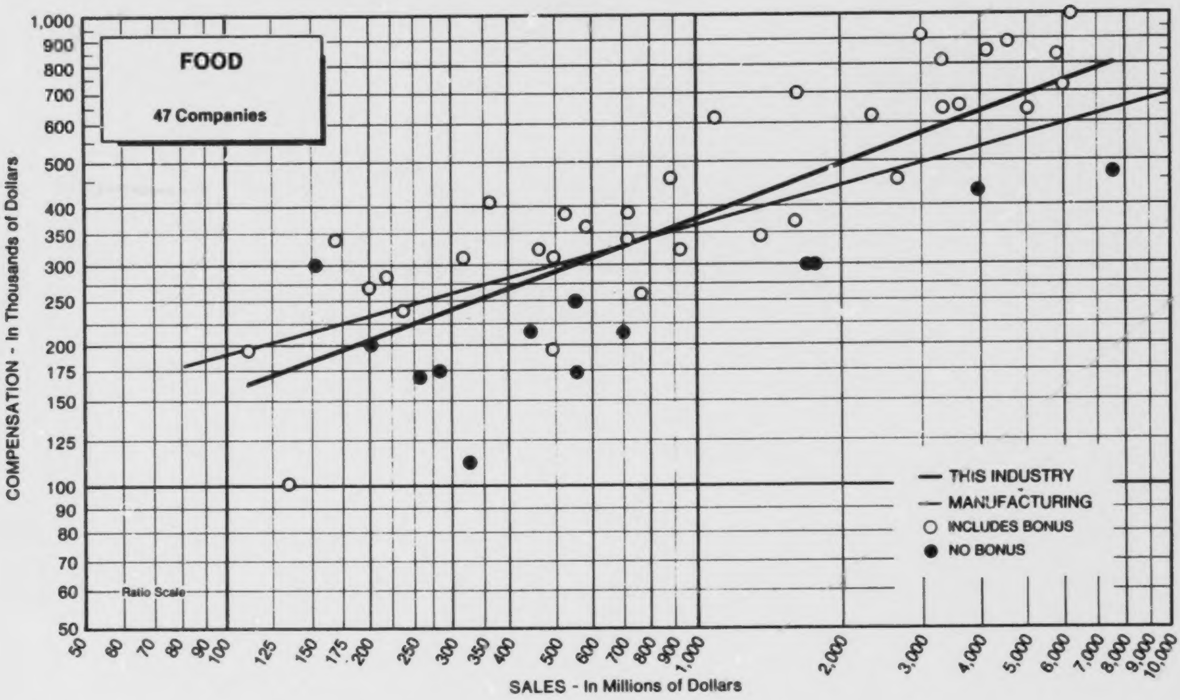
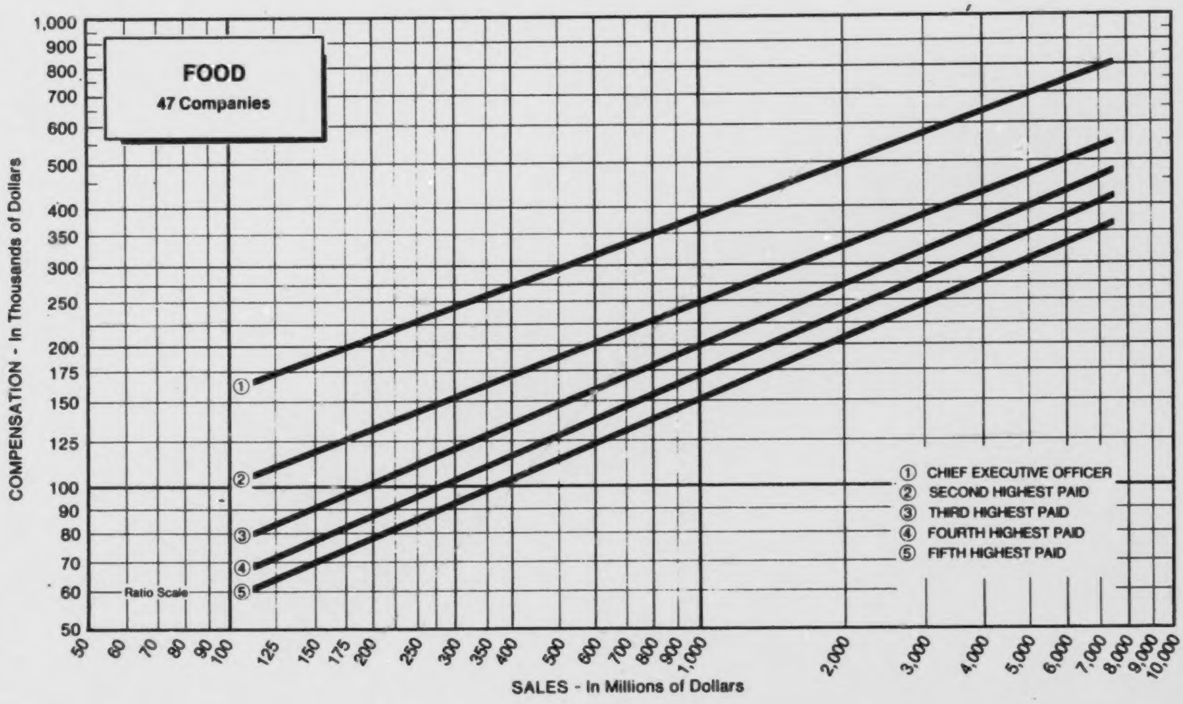


Chart 3: Compensation of the Five Highest Paid Executives, by Company Sales



In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.5742 + 0.2893 \log X$	66%
Second...........	$\log Y = 1.2787 + 0.3285 \log X$	72
Third............	$\log Y = 1.1539 + 0.3382 \log X$	73
Fourth...........	$\log Y = 1.1056 + 0.3302 \log X$	75
Fifth	$\log Y = 1.0792 + 0.3283 \log X$	71

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

Forty-two (89 percent) of the 47 companies have an **annual executive bonus plan;** that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Thirty-seven (88 percent) of these companies made a bonus award for 1982 performance; most (34) also paid a bonus for 1981. Among the five companies that did not pay a bonus for 1982, three paid a bonus for 1981 performance, but the other two paid no bonus in either year.

Twelve (26 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Eight (17 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Thirty-one (66 percent) of the companies have a **stock option plan.** Sixteen of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; eight grant only ISO's, and seven only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by 20 (83 percent) of the 24 companies that grant ISO's, and by 15 (65 percent) of the 23 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by ten (42 percent) of the 24 companies that grant ISO's. Most (seven) limit SAR's to a small group of top management (essentially, "insiders"); the other three plans grant SAR's to all ISO recipients.

SAR's are provided by 12 (52 percent) of the 23 companies that grant nonqualified options. Most (9) limit SAR's to a small group of top management; the other three plans grant SAR's to all nonqualified option recipients.

Textile Mill Products

This industry includes processors of natural and synthetic fibers; manufacturers of fabrics, rugs, carpets, felt products and related textiles. (SIC: 22)

The Companies

Executive compensation data for this industry were obtained from 25 companies, classified below according to 1982 sales volume. The smallest company had sales of \$129 million; the largest, \$2.9 billion.

1982 Sales	*Number of Companies*
\$1 billion and over......	4
500 - 999 million	10
300 - 499 million	5
200 - 299 million	4
100 - 199 million	2
Total	25

Median Sales:
\$537 million
Middle 50 percent:
\$347 million to
\$870 million

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 25 companies is plotted in Chart 4. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	\$331,000	\$260,000 to \$418,000
Second	250,000	176,000 to 340,000
Third	200,000	144,000 to 255,000
Fourth	178,000	128,000 to 216,000
Fifth	156,000	117,000 to 196,000

Chart 4: Compensation of the Chief Executive, by Company Sales

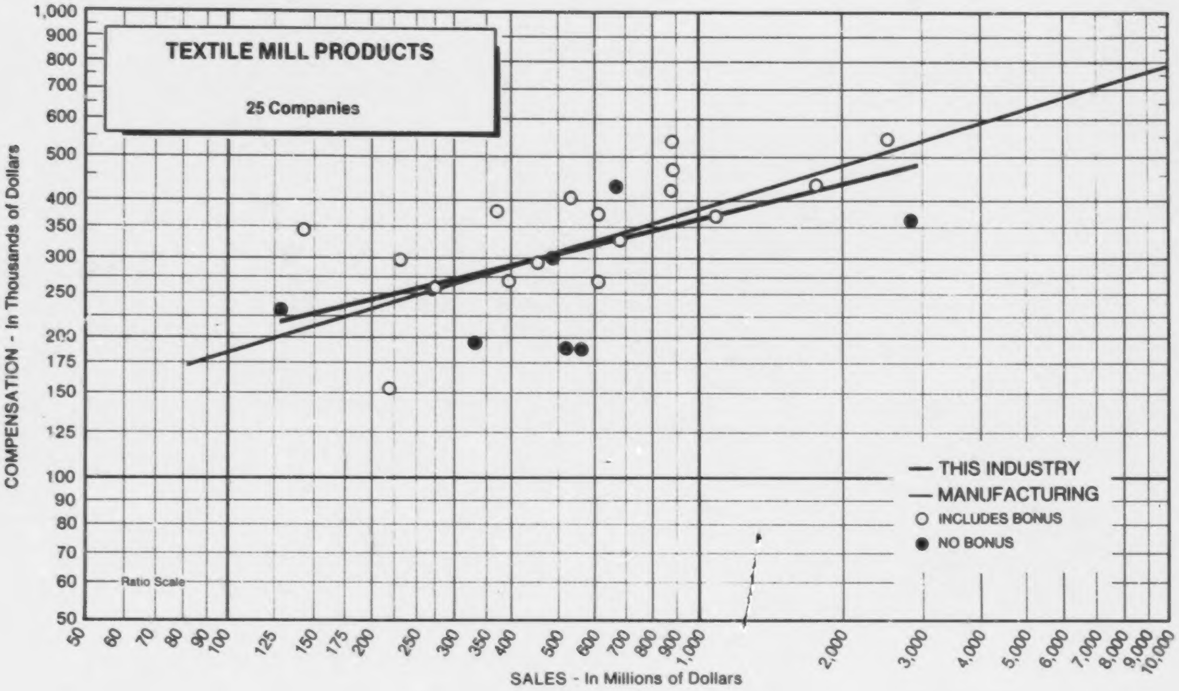
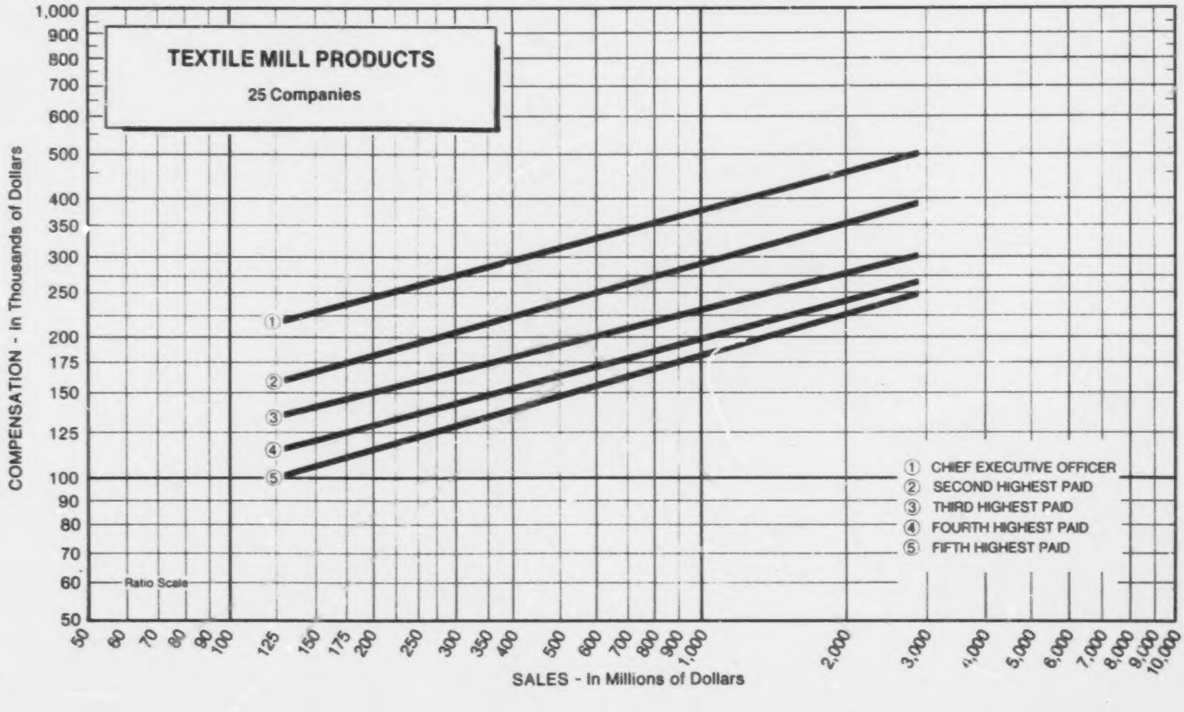


Chart 5: Compensation of the Five Highest Paid Executives, by Company Sales



The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	77%	70% to 86%
Third highest	62	53 to 72
Fourth highest	51	47 to 58
Fifth highest	46	42 to 57

As the lines on Chart 5 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7970 + 0.2578 \log X$	36%
Second	$\log Y = 1.6026 + 0.2856 \log X$	37
Third	$\log Y = 1.5712 + 0.2625 \log X$	37
Fourth	$\log Y = 1.5095 + 0.2617 \log X$	42
Fifth	$\log Y = 1.4358 + 0.2737 \log X$	43

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.8197 + 0.2102 \log X$	35%
Second	$\log Y = 1.6193 + 0.2413 \log X$	35
Third	$\log Y = 1.5889 + 0.2231 \log X$	38
Fourth	$\log Y = 1.5186 + 0.2220 \log X$	45
Fifth	$\log Y = 1.4281 + 0.2455 \log X$	47

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

Twenty-four (96 percent) of the 25 companies have an **annual executive bonus plan**; that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Eighteen (75 percent) of these companies made a bonus award for 1982 performance; most (15) also paid a bonus for 1981. Among the six companies that did not pay a bonus for 1982, four paid a bonus for 1981 performance, but the other two paid no bonus in either year.

Eleven (44 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Twelve (48 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Fifteen (60 percent) of the companies have a **stock option plan.** Ten of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; two grant only ISO's, and three only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by eight of the 12 companies that grant ISO's, and by seven of the 13 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by five of the 12 companies that grant ISO's. Most (four) limit SAR's to a small group of top management (essentially, "insiders"); the other plan grants SAR's to all ISO recipients.

SAR's are provided by six of the 13 companies that grant nonqualified options. Most (four) limit SAR's to a small group of top management; the other two plans grant SAR's to all nonqualified option recipients.

Paper and Allied Products

This industry includes manufacturers and processors of paper, paperboard and pulp; and converted products such as bags, boxes and envelopes. (SIC: 26)

The Companies

Executive compensation data for this industry were obtained from 27 companies, classified below according to 1982 sales volume. The smallest company had sales of $103 million; the largest, $4.0 billion.

Chart 6: Compensation of the Chief Executive, by Company Sales

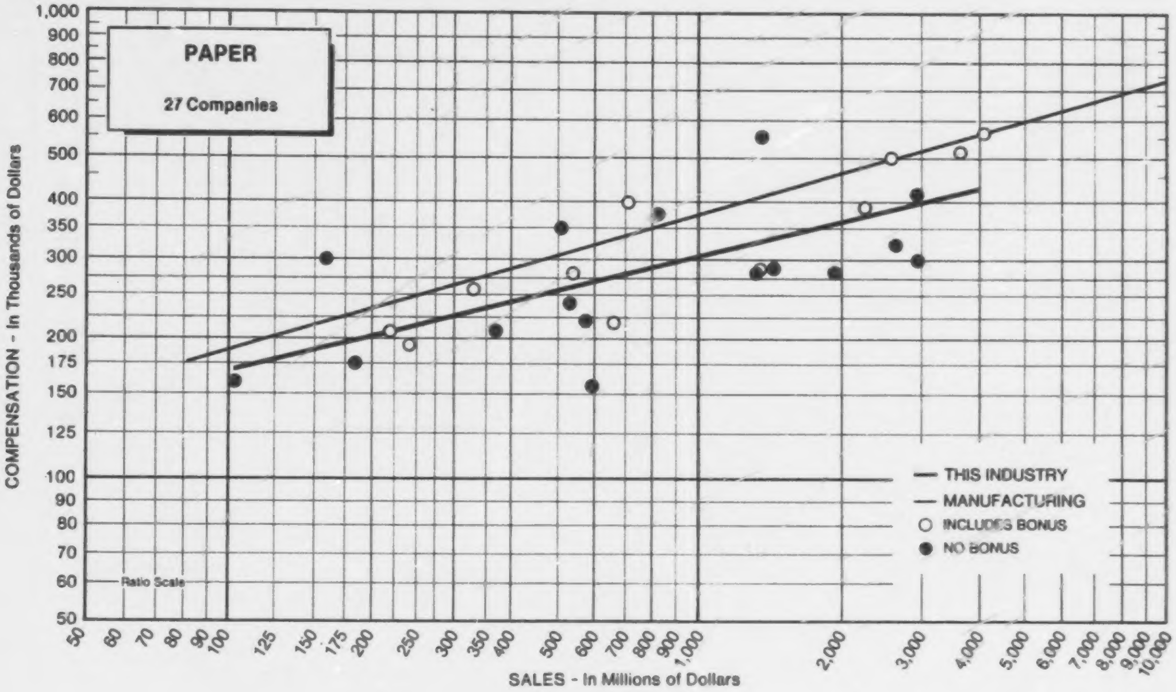
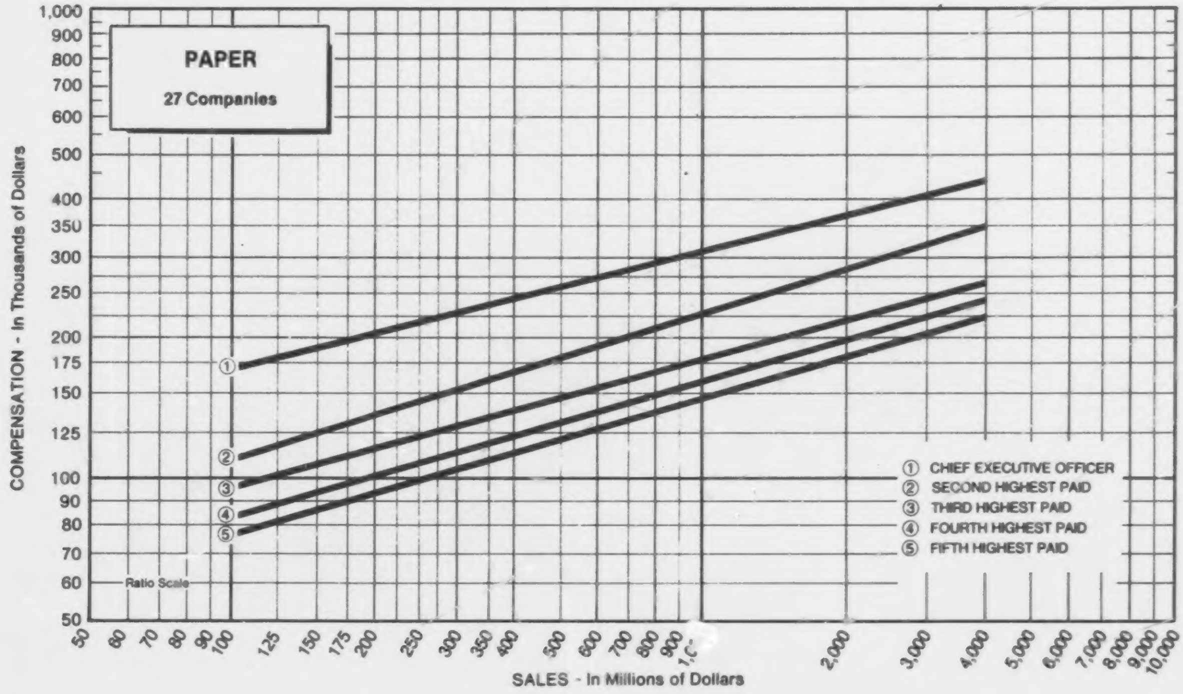


Chart 7: Compensation of the Five Highest Paid Executives, by Company Sales



1982 Sales	*Number of Companies*	
$2 billion and over	7	Median Sales:
1 - 1,999 billion	5	$712 million
300 - 999 million	10	Middle 50 percent:
100 - 299 million	5	$361 million to
Total	27	$2.3 billion

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 27 companies is plotted in Chart 6. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$290,000	$218,000 to $393,000
Second	225,000	150,000 to 289,000
Third	175,000	129,000 to 225,000
Fourth	155,000	111,000 to 215,000
Fifth	140,000	98,000 to 205,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	72%	63% to 81%
Third highest	58	47 to 66
Fourth highest	50	41 to 58
Fifth highest	46	38 to 57

As the lines on Chart 7 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7246 + 0.2548 \log X$	54%
Second	$\log Y = 1.3928 + 0.3202 \log X$	64
Third	$\log Y = 1.4705 + 0.2583 \log X$	59
Fourth	$\log Y = 1.3624 + 0.2786 \log X$	70
Fifth	$\log Y = 1.3336 + 0.2768 \log X$	68

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7359 + 0.2337 \log X$	52%
Second	$\log Y = 1.3925 + 0.3030 \log X$	59
Third	$\log Y = 1.4284 + 0.2536 \log X$	50
Fourth	$\log Y = 1.4512 + 0.2277 \log X$	55
Fifth	$\log Y = 1.3011 + 0.2728 \log X$	67

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

Twenty-three (85 percent) of the 27 companies have an **annual executive bonus plan;** that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Fifteen (65 percent) of these companies made a bonus award for 1982 performance; most (13) also paid a bonus for 1981. Among the eight companies that did not pay a bonus for 1982, six paid a bonus for 1981 performance, but the other two paid no bonus in either year.

Eleven (41 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Three (11 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Twenty-one (78 percent) of the companies have a **stock option plan.** Thirteen of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; six grant only ISO's, and two only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by ten (53 percent) of the 19 companies that grant ISO's, and by eight (53 percent) of the 15 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by eight (42 percent) of the 19 companies that grant ISO's. Four limit SAR's to a small group of top management (essentially, "insiders"); the other four plans grant SAR's to all ISO recipients.

SAR's are provided by 11 (73 percent) of the 15 companies that grant nonqualified options. Most (7) limit SAR's to a small group of top management; the other four plans grant SAR's to all nonqualified option recipients.

Printing and Publishing

This industry includes companies engaged in printing by one or more of the common processes and companies engaged in publishing newspapers, books and periodicals. (SIC: 27)

The Companies

Executive compensation data for this industry were obtained from 25 companies, classified below according to 1982 sales volume. The smallest company had sales of $97 million; the largest, $3.5 billion.

1982 Sales	*Number of Companies*
$1 billion and over	6
500 - 999 million	4
300 - 499 million	4
200 - 299 million	6
100 - 199 million	5
Total	25

Median Sales:
$410 million
Middle 50 percent:
$209 million to
$1.3 billion

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 25 companies is plotted in Chart 8. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$400,000	$236,000 to $473,000
Second	275,000	155,000 to 400,000
Third	208,000	130,000 to 300,000
Fourth	180,000	105,000 to 279,000
Fifth	174,000	90,000 to 242,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	74%	62% to 83%
Third highest	58	50 to 70
Fourth highest	52	42 to 61
Fifth highest	44	35 to 57

As the lines on Chart 9 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7681 + 0.2879 \log X$	40%
Second	$\log Y = 1.2568 + 0.4227 \log X$	57
Third	$\log Y = 1.1546 + 0.4307 \log X$	61
Fourth	$\log Y = 1.0454 + 0.4502 \log X$	62
Fifth	$\log Y = 0.9634 + 0.4593 \log X$	61

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.8439 + 0.2100 \log X$	28%
Second	$\log Y = 1.4524 + 0.3069 \log X$	38
Third	$\log Y = 1.2961 + 0.3364 \log X$	50
Fourth	$\log Y = 1.1850 + 0.3551 \log X$	56
Fifth	$\log Y = 1.1035 + 0.3712 \log X$	49

Chart 8: Compensation of the Chief Executive, by Company Sales

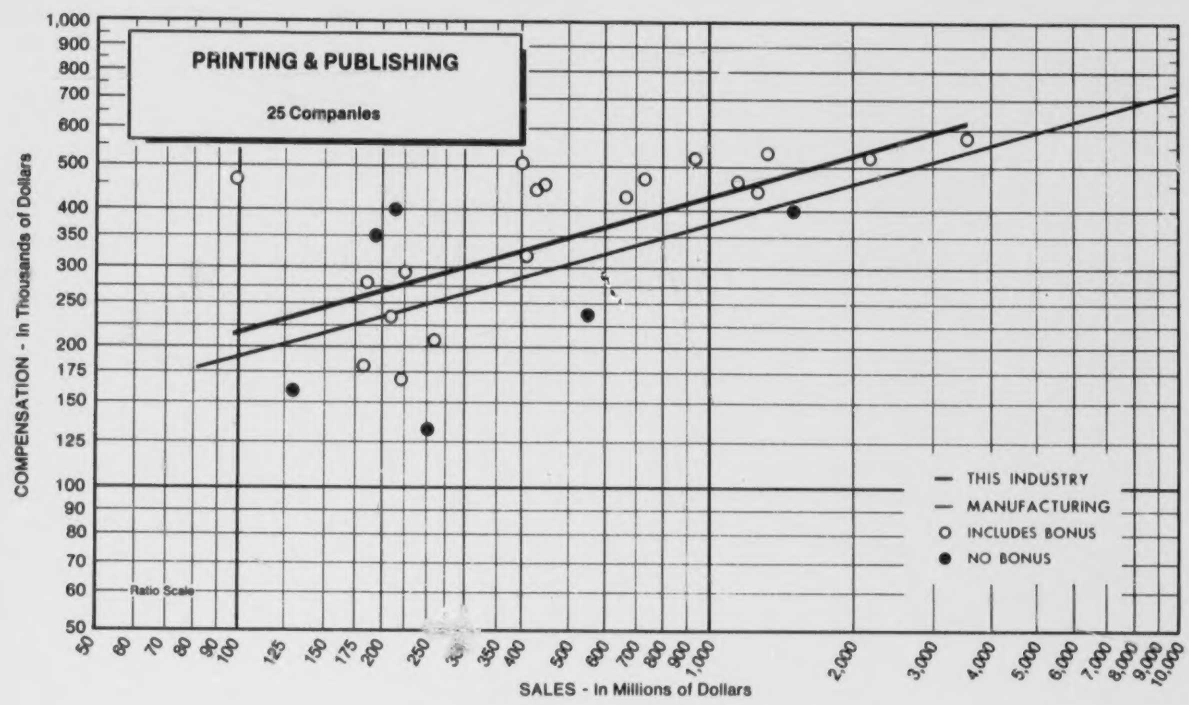
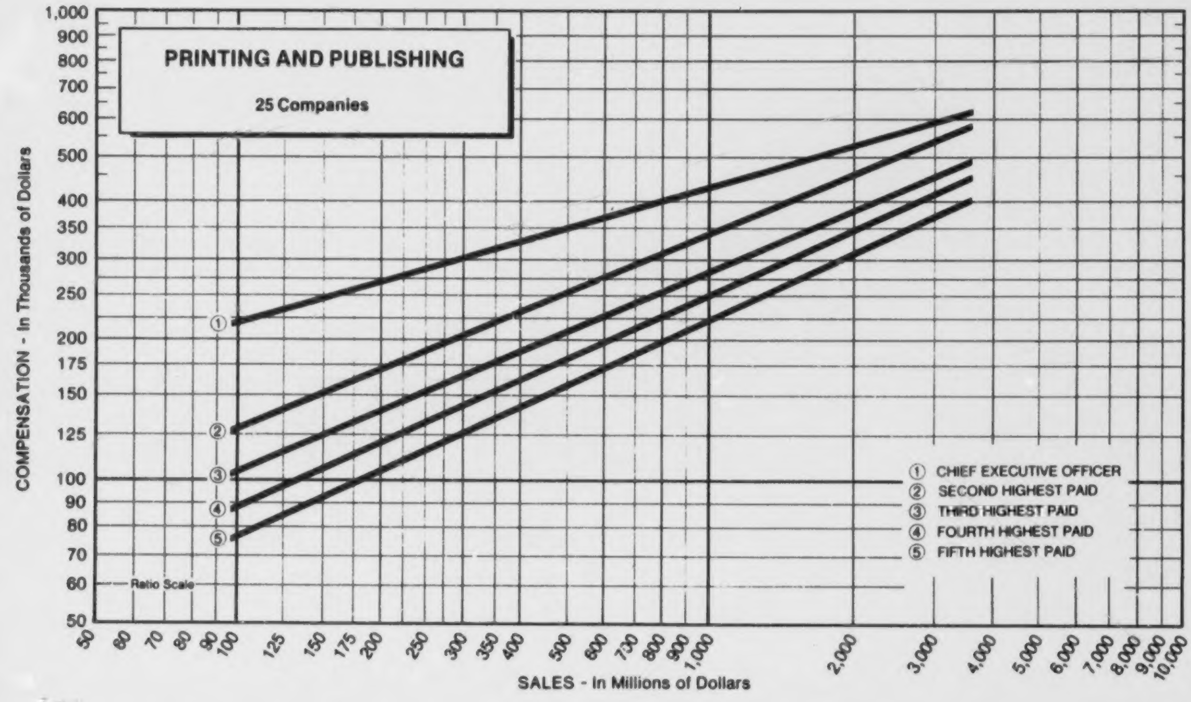


Chart 9: Compensation of the Five Highest Paid Executives, by Company Sales



Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

Twenty (80 percent) of the 25 companies have an **annual executive bonus plan;** that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Eighteen (90 percent) of these companies made a bonus award for 1982 performance; all of them also paid a bonus for 1981. The two companies that did not pay a bonus for 1982 paid a bonus for 1981 performance, however.

Seven (28 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Seven (28 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Eighteen (72 percent) of the companies have a **stock option plan.** Eleven of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; three grant only ISO's, and four only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by 11 (79 percent) of the 14 companies that grant ISO's, and by 11 (73 percent) of the 15 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by six (43 percent) of the 14 companies that grant ISO's. Three limit SAR's to a small group of top management (essentially, "insiders"); the other three plans grant SAR's to all ISO recipients.

SAR's are provided by eight (53 percent) of the 15 companies that grant nonqualified options. Three limit SAR's to a small group of top management; the other eight plans grant SAR's to all nonqualified option recipients.

Industrial Chemicals

This industry includes producers of basic chemicals such as acids, alkalis, salts and organic chemicals and chemical products to be used in further manufacture such as synthetic fibers, plastics, dry colors and pigments. (SIC: 281, 282 and 285-289)

The Companies

Executive compensation data for this industry were obtained from 42 companies, classified below according to 1982 sales volume. The smallest company had sales of $125 million; the largest, $33 billion.

1982 Sales	*Number of Companies*
$5 billion and over......	8
2 - 4,999 billion.......	5
1 - 1,999 billion.......	9
500 - 999 million......	10
100 - 499 million......	10
Total............	42

Median Sales:
$1.3 billion

Middle 50 percent:
$485 million to
$3.1 billion

1982 Compensation

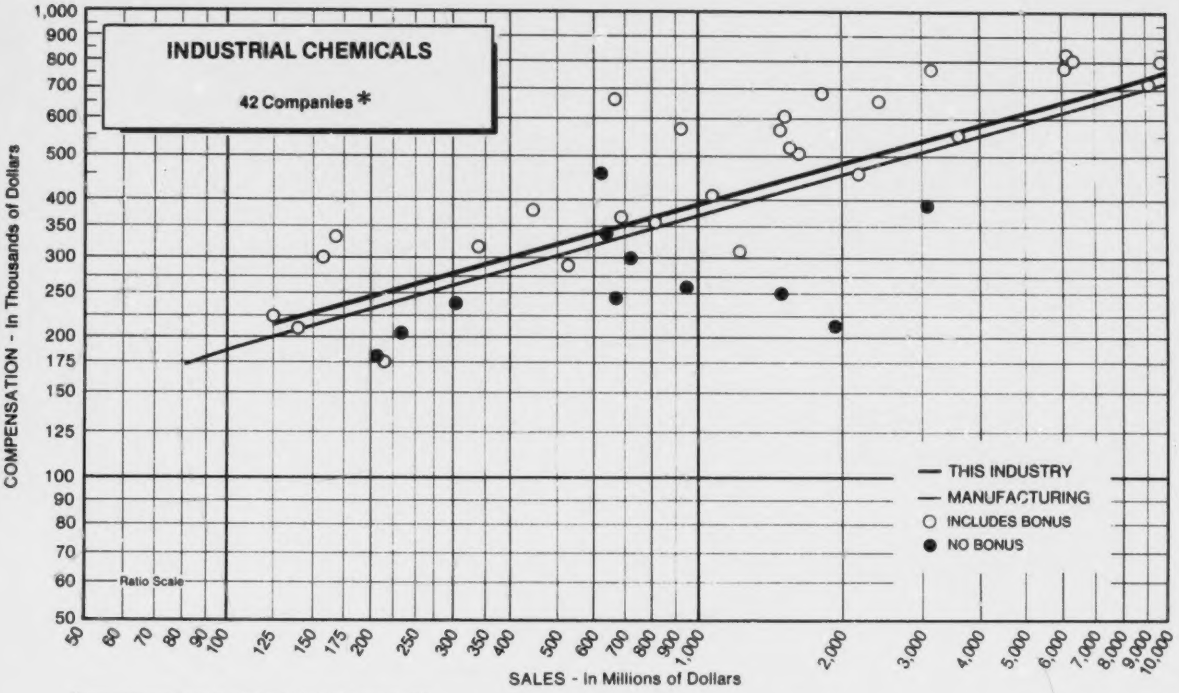
For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 42 companies is plotted in Chart 10. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid..........	$390,000	$300,000 to $605,000
Second..............	310,000	220,000 to 369,000
Third...............	215,000	180,000 to 290,000
Fourth..............	200,000	157,000 to 255,000
Fifth................	177,000	134,000 to 235,000

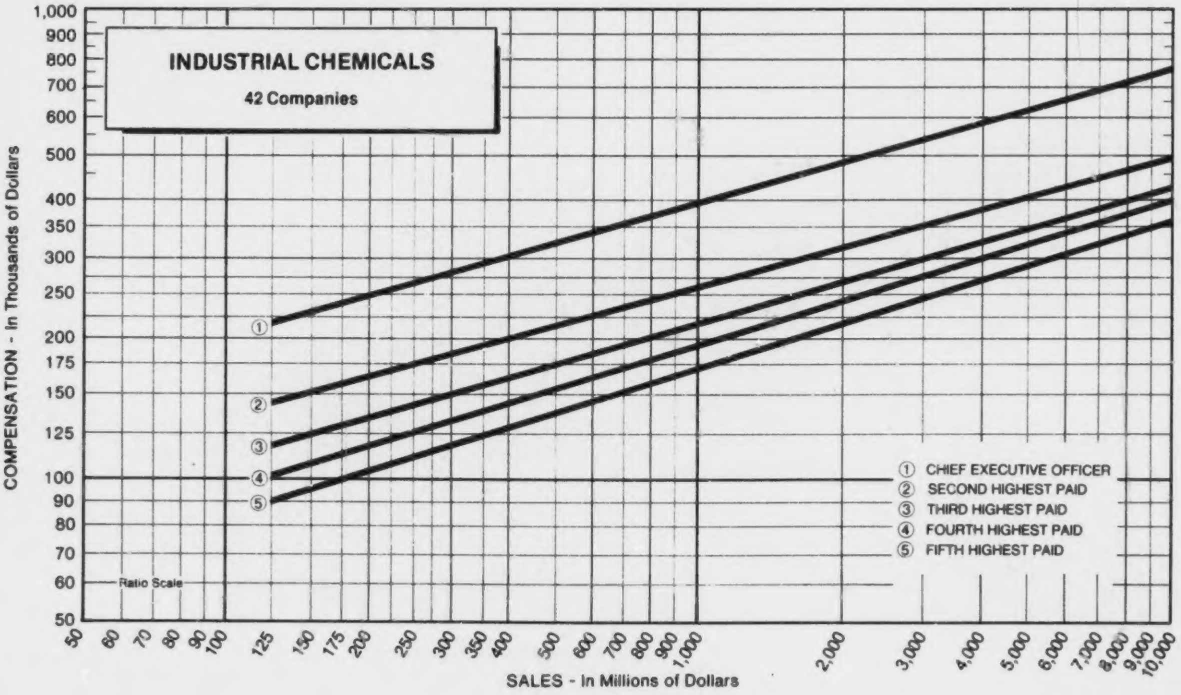
The ratio of the pay of each executive to that of the chief executive officer is shown below.

Chart 10: Compensation of the Chief Executive, by Company Sales



*Three companies with sales over $10 billion not plotted

Chart 11: Compensation of the Five Highest Paid Executives, by Company Sales



	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	70%	54% to 80%
Third highest	57	47 to 71
Fourth highest	51	39 to 59
Fifth highest	45	35 to 56

As the lines on Chart 11 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7455 + 0.2825 \log X$	64%
Second	$\log Y = 1.5589 + 0.2848 \log X$	66
Third	$\log Y = 1.4427 + 0.2962 \log X$	71
Fourth	$\log Y = 1.3909 + 0.2963 \log X$	75
Fifth	$\log Y = 1.3286 + 0.2995 \log X$	76

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7867 + 0.2331 \log X$	72%
Second	$\log Y = 1.6077 + 0.2328 \log X$	66
Third	$\log Y = 1.4800 + 0.2493 \log X$	71
Fourth	$\log Y = 1.4477 + 0.2442 \log X$	73
Fifth	$\log Y = 1.3832 + 0.2496 \log X$	74

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

Forty (95 percent) of the 42 companies have an **annual executive bonus plan**; that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Thirty-one (78 percent) of these companies made a bonus award for 1982 performance; most (28) also paid a bonus for 1981. Among the nine companies that did not pay a bonus for 1982, seven paid a bonus for 1981 performance, but the other two paid no bonus in either year.

Twenty-one (50 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Fourteen (33 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Thirty-two (76 percent) of the companies have a **stock option plan.** Twenty-two of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; three grant only ISO's, and seven only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by 20 (80 percent) of the 25 companies that grant ISO's, and by 17 (59 percent) of the 29 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by 15 (60 percent) of the 25 companies that grant ISO's. Most (9) limit SAR's to a small group of top management (essentially, "insiders"); the other six plans grant SAR's to all ISO recipients.

SAR's are provided by six of the 22 (76 percent) of the 29 companies that grant nonqualified options. Most (12) limit SAR's to a small group of top management; the other ten plans grant SAR's to all nonqualified option recipients.

Consumer Chemicals

This industry includes manufacturers of finished chemical products to be used for ultimate consumption such as drugs, soap and detergents and cleaning preparations, perfumes, cosmetics and other toilet preparations. (SIC: 283 and 284)

The Companies

Executive compensation data for this industry were obtained from 23 companies, classified below according to 1982 sales volume. The smallest company had sales of $153 million; the largest, $5.8 billion.

Chart 12: Compensation of the Chief Executive, by Company Sales

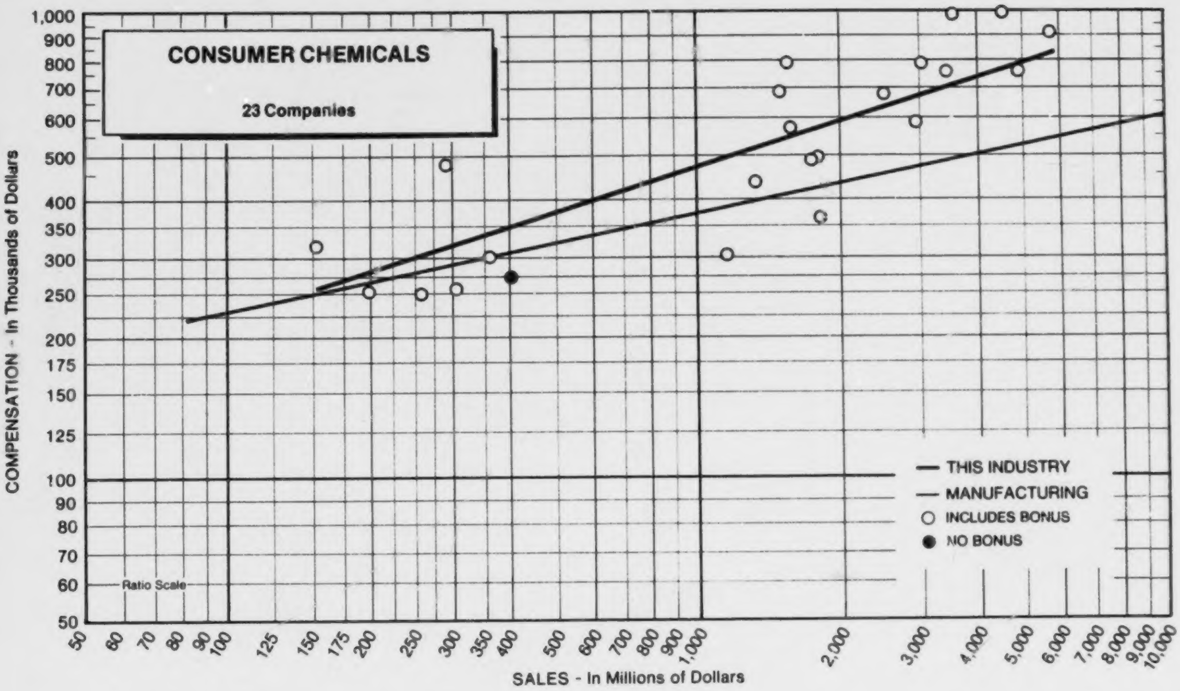
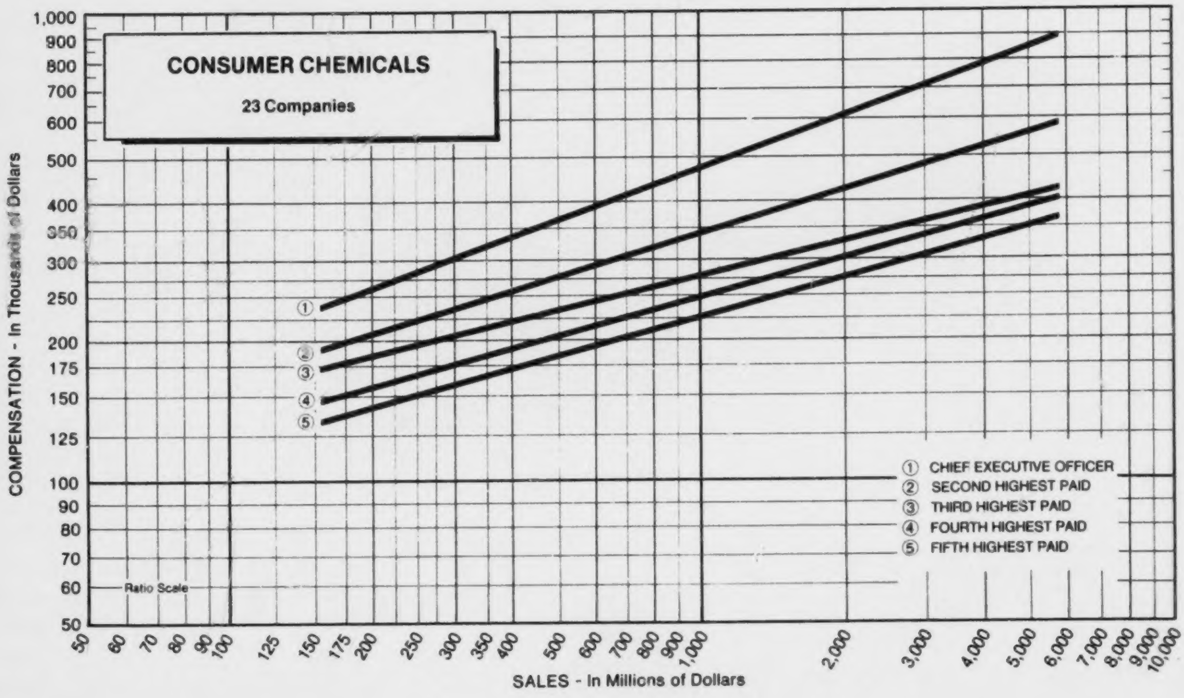


Chart 13: Compensation of the Five Highest Paid Executives, by Company Sales



1982 Sales	*Number of Companies*
$2 billion and over	8
1 - 1,999 billion	8
100 - 999 million	7
Total	23

Median Sales:
$1.6 billion
Middle 50 percent:
$349 million to
$3.1 billion

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 23 companies is plotted in Chart 12. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$495,000	$302,000 to $762,000
Second	368,000	242,000 to 558,000
Third	302,000	209,000 to 400,000
Fourth	265,000	196,000 to 376,000
Fifth	249,000	168,000 to 334,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	73%	64% to 83%
Third highest	58	52 to 65
Fourth highest	51	47 to 57
Fifth highest	46	43 to 52

As the lines on Chart 13 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.5881 + 0.3583 \log X$	73%
Second	$\log Y = 1.5915 + 0.3127 \log X$	63
Third	$\log Y = 1.6904 + 0.2510 \log X$	58
Fourth	$\log Y = 1.5167 + 0.2922 \log X$	64
Fifth	$\log Y = 1.4988 + 0.2839 \log X$	65

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.6346 + 0.2850 \log X$	72%
Second	$\log Y = 1.6252 + 0.2454 \log X$	63
Third	$\log Y = 1.6884 + 0.1956 \log X$	56
Fourth	$\log Y = 1.5653 + 0.2237 \log X$	64
Fifth	$\log Y = 1.5982 + 0.2009 \log X$	61

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

Twenty-two (96 percent) of the 23 companies have an **annual executive bonus plan**; that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Twenty-one (96 percent) of these companies made a bonus award for 1982 performance; all of them also paid a bonus for 1981. The one company that did not pay a bonus for 1982 paid no bonus for 1981 performance, either.

Nine (39 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Ten (43 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Nineteen (83 percent) of the companies have a **stock option plan.** Seventeen of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; one grants only ISO's, and one only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by 12 (67 percent) of the 18 companies that grant ISO's, and by 13 (72 percent) of the 18 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by eight (44 percent) of the 18 companies that grant ISO's. Most (6) limit SAR's to a small group of top management (essentially, "insiders"); the other two plans grant SAR's to all ISO recipients.

SAR's are provided by 12 (67 percent) of the 18 companies that grant nonqualified options. Most (8) limit SAR's to a small group of top management; the other four plans grant SAR's to all nonqualified option recipients.

Stone, Clay, Glass and Concrete Products

This industry includes manufacturers of flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut stone products, abrasive and asbestos products, etc., from materials taken principally from the earth in the form of stone, clay and sand. (SIC: 32)

The Companies

Executive compensation data for this industry were obtained from 25 companies, classified below according to 1982 sales volume. The smallest company had sales of $109 million; the largest, $6.6 billion.

1982 Sales	*Number of Companies*
$2 billion and over	5
1 - 1,999 billion	5
500 - 999 million	5
300 - 499 million	6
100 - 299 million	4
Total	25

Median Sales:
$889 million
Middle 50 percent:
$352 million to
$1.7 billion

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 25 companies is plotted in Chart 14. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$324,000	$250,000 to $443,000
Second	215,000	172,000 to 325,000
Third	185,000	146,000 to 263,000
Fourth	156,000	130,000 to 214,000
Fifth	147,000	105,000 to 188,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	72%	61% to 80%
Third highest	56	49 to 66
Fourth highest	47	43 to 58
Fifth highest	46	39 to 49

As the lines on Chart 15 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.6288 + 0.3005 \log X$	58%
Second	$\log Y = 1.5120 + 0.2874 \log X$	53
Third	$\log Y = 1.4603 + 0.2734 \log X$	51
Fourth	$\log Y = 1.3195 + 0.3000 \log X$	71
Fifth	$\log Y = 1.2626 + 0.3033 \log X$	73

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.5433 + 0.3054 \log X$	64%
Second	$\log Y = 1.4034 + 0.3002 \log X$	58
Third	$\log Y = 1.3693 + 0.2787 \log X$	61
Fourth	$\log Y = 1.2423 + 0.3046 \log X$	75
Fifth	$\log Y = 1.1832 + 0.3100 \log X$	78

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Chart 14: Compensation of the Chief Executive, by Company Sales

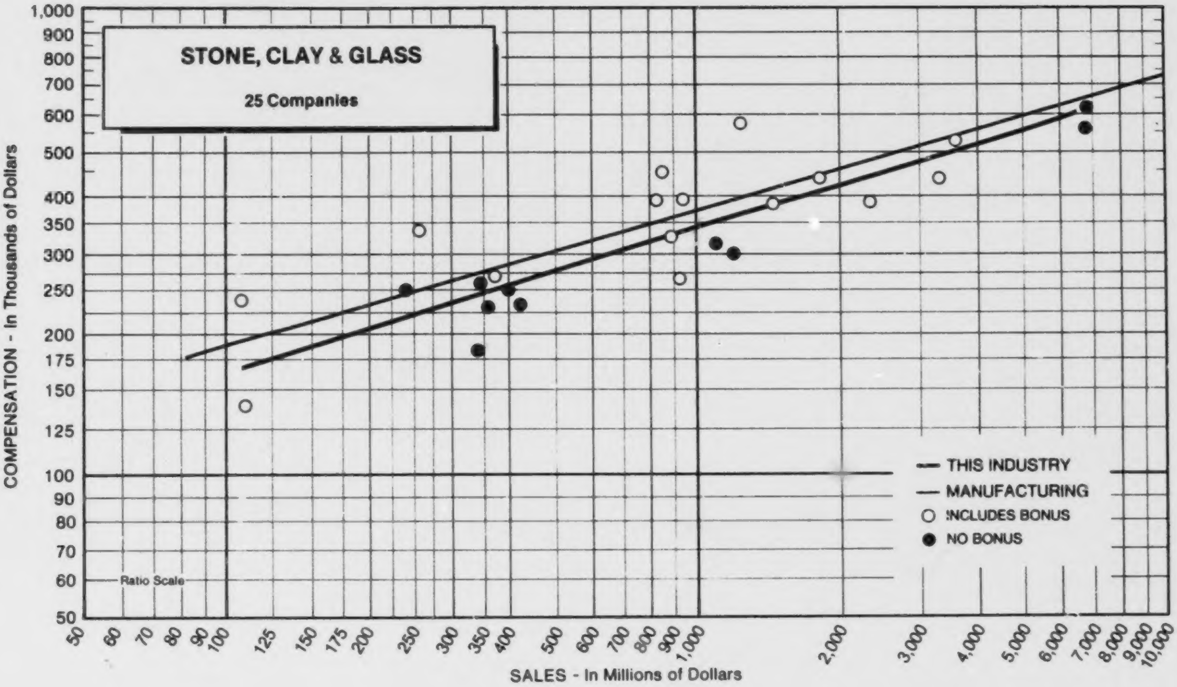
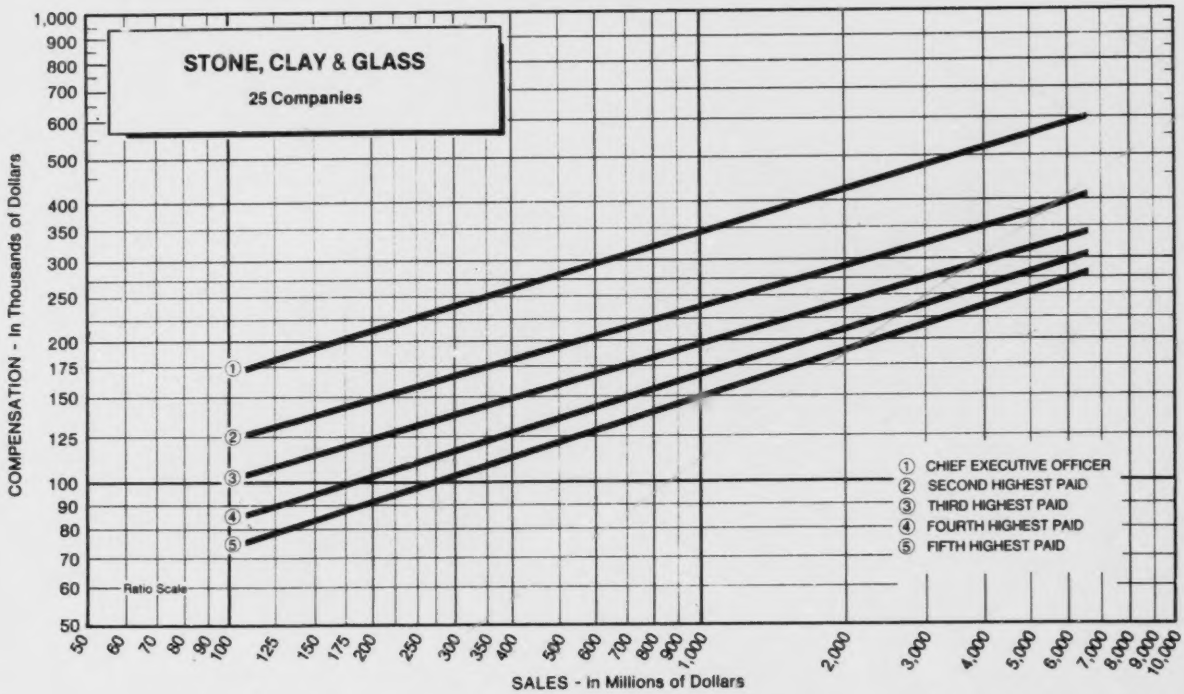


Chart 15: Compensation of the Five Highest Paid Executives, by Company Sales



Executive Incentive Plans

Twenty-two (88 percent) of the 25 companies have an **annual executive bonus plan;** that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Sixteen (73 percent) of these companies made a bonus award for 1982 performance; most (15) also paid a bonus for 1981. Among the six companies that did not pay a bonus for 1982, four paid a bonus for 1981 performance, but the other two paid no bonus in either year.

Fourteen (56 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Four (16 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Twenty-one (84 percent) of the companies have a **stock option plan.** Fourteen of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; three grant only ISO's, and four only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by 12 (71 percent) of the 17 companies that grant ISO's, and by ten (56 percent) of the 18 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by eight (47 percent) of the 17 companies that grant ISO's. Most (6) limit SAR's to a small group of top management (essentially, "insiders"); the other two plans grant SAR's to all ISO recipients.

SAR's are provided by 12 (67 percent) of the 18 companies that grant nonqualified options. Most (9) limit SAR's to a small group of top management; the other three plans grant SAR's to all nonqualified option recipients.

Primary Metals

This industry includes companies engaged in the smelting of ferrous and nonferrous metals; in rolling, drawing and alloying these metals; in the manufacture of castings, forgings and other basic metal products; and in the manufacture of nails, spikes and insulated wire and cable. (SIC: 33)

The Companies

Executive compensation data for this industry were obtained from 30 companies, classified below according to 1982 sales volume. The smallest company had sales of $115 million; the largest, $18.9 billion.

1982 Sales	*Number of Companies*
$5 billion and over	3
1 - 4,999 billion	8
500 - 999 million	5
300 - 499 million	7
100 - 299 million	7
Total	30

Median Sales:
$574 million
Middle 50 percent:
$282 million to
$2.9 billion

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 30 companies is plotted in Chart 16. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

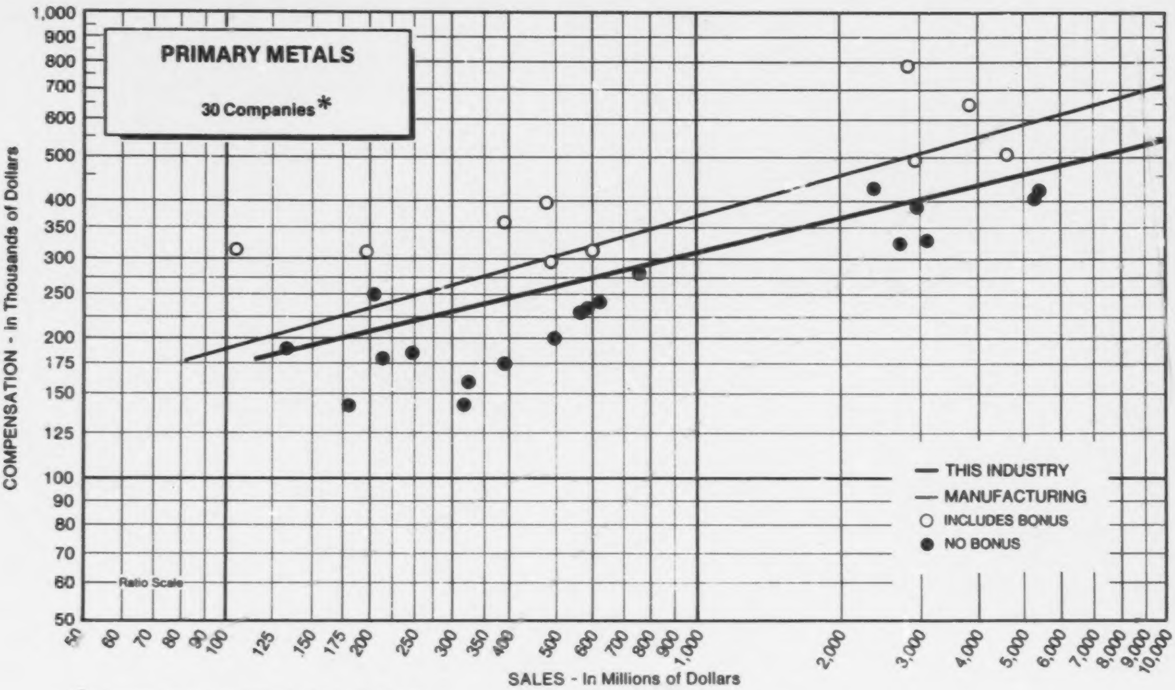
	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$313,000	$197,000 to $414,000
Second	222,000	137,000 to 300,000
Third	164,000	106,000 to 245,000
Fourth	150,000	95,000 to 230,000
Fifth	123,000	82,000 to 207,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	72%	57% to 83%
Third highest	56	50 to 62
Fourth highest	48	42 to 56
Fifth highest	43	37 to 50

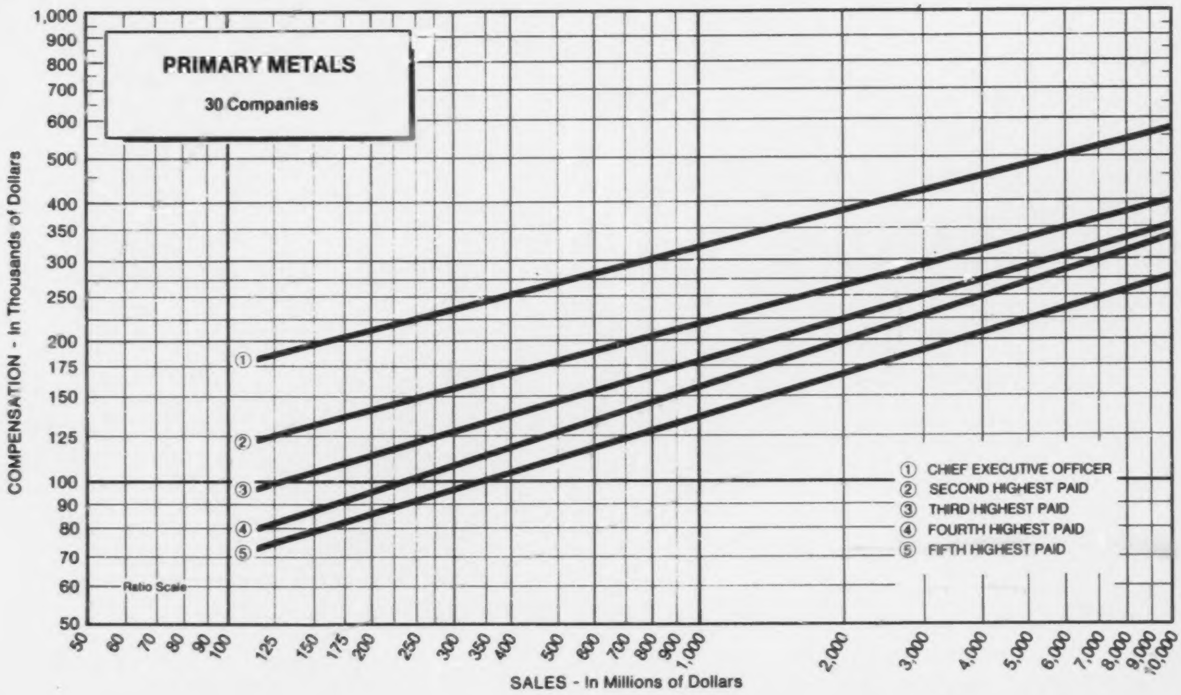
As the lines on Chart 17 illustrate, the total compensation of each of the five groups of executives is related posi-

Chart 16: Compensation of the Chief Executive, by Company Sales



* One company with sales over $10 billion not plotted

Chart 17: Compensation of the Five Highest Paid Executives, by Company Sales



tively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	Regression Formula	r^2
Highest paid	$\log Y = 1.7441 + 0.2506 \log X$	57%
Second	$\log Y = 1.4958 + 0.2799 \log X$	57
Third	$\log Y = 1.4008 + 0.2822 \log X$	62
Fourth	$\log Y = 1.2970 + 0.2983 \log X$	65
Fifth	$\log Y = 1.2750 + 0.2865 \log X$	71

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	Regression Formula	r^2
Highest paid	$\log Y = 1.5294 + 0.3013 \log X$	82%
Second	$\log Y = 1.2899 + 0.3311 \log X$	83
Third	$\log Y = 1.1437 + 0.3427 \log X$	83
Fourth	$\log Y = 1.1187 + 0.3384 \log X$	82
Fifth	$\log Y = 1.1133 + 0.3248 \log X$	82

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

Twenty-nine (97 percent) of the 30 companies have an **annual executive bonus plan;** that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Fourteen (48 percent) of these companies made a bonus award for 1982 performance; all of them also paid a bonus for 1981. Among the 15 companies that did not pay a bonus for 1982, 12 paid a bonus for 1981 performance, but the other three paid no bonus in either year.

Five (17 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Five (17 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Twenty-four (80 percent) of the companies have a **stock option plan.** Twelve of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; three grant only ISO's, and nine only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by six (40 percent) of the 15 companies that grant ISO's, and by ten (48 percent)of the 21 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by five of the 15 companies that grant ISO's. Two limit SAR's to a small group of top management (essentially, "insiders"); the other three plans grant SAR's to all ISO recipients.

SAR's are provided by 14 (67 percent) of the 21 companies that grant nonqualified options. Seven limit SAR's to a small group of top management; the other seven plans grant SAR's to all nonqualified option recipients.

Fabricated Metal Products (except Machinery and Transportation Equipment)

This industry includes manufacturers of ferrous and nonferrous metals products such as metal cans, tinware, hand tools, cutlery, hardware, fabricated structural metal products, metal stampings, and a variety of metal and wire products. Excluded are machinery, transportation equipment, professional, scientific and controlling instruments, jewelry and silverware. (SIC: 34)

The Companies

Executive compensation data for this industry were obtained from 23 companies, classified below according to 1982 sales volume. The smallest company had sales of $158 million; the largest, $4.9 billion.

1982 Sales	Number of Companies	
$1 billion and over	3	Median Sales:
500 - 999 million	4	$436 million
300 - 499 million	10	Middle 50 percent:
100 - 299 million	6	$230 million to
Total	23	$968 million

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives,

Chart 18: Compensation of the Chief Executive, by Company Sales

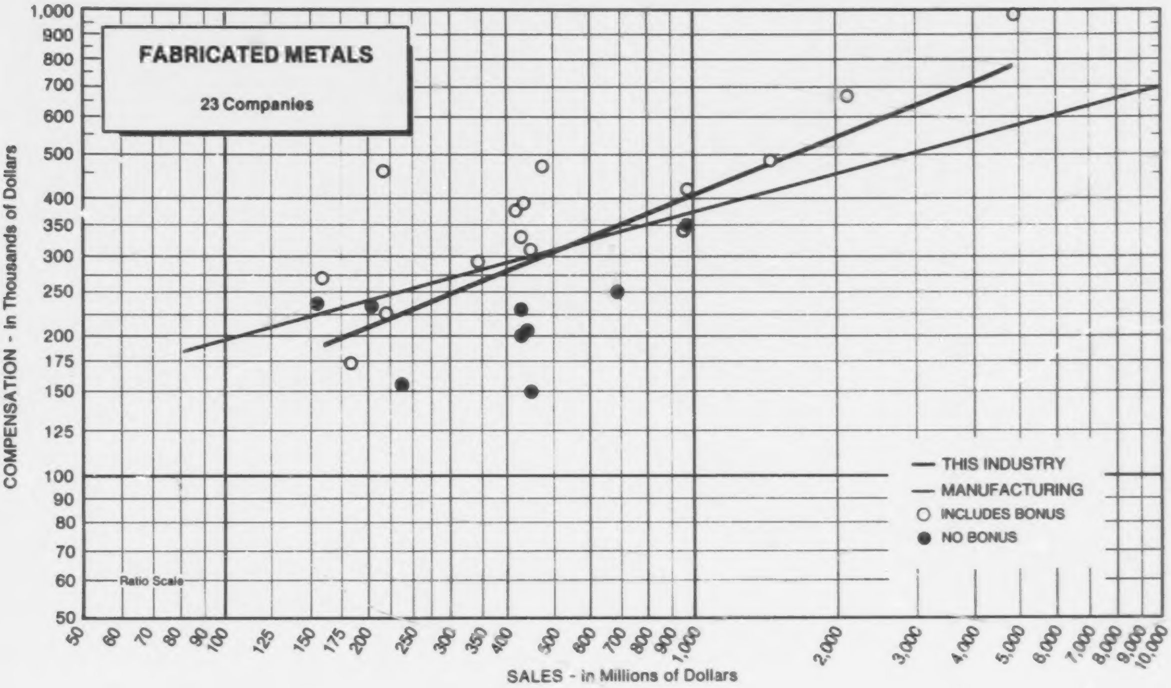
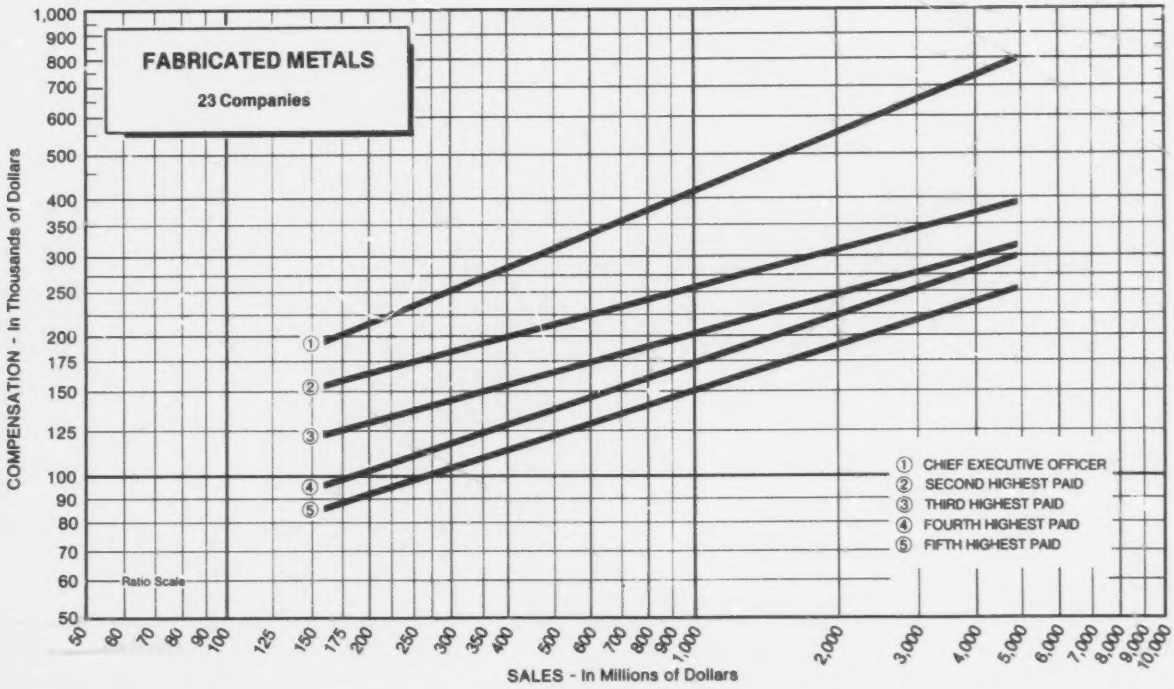


Chart 19: Compensation of the Five Highest Paid Executives, by Company Sales



without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 23 companies is plotted in Chart 18. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$310,000	$221,000 to $435,000
Second	216,000	149,000 to 267,000
Third	172,000	130,000 to 218,000
Fourth	132,000	105,000 to 176,000
Fifth	125,000	87,000 to 156,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	71%	64% to 79%
Third highest..........	54	46 to 66
Fourth highest.........	46	37 to 56
Fifth highest	41	33 to 48

As the lines on Chart 19 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.4041 + 0.4030 \log X$	52%
Second...........	$\log Y = 1.6122 + 0.2623 \log X$	37
Third............	$\log Y = 1.4841 + 0.2736 \log X$	32
Fourth...........	$\log Y = 1.2565 + 0.3271 \log X$	50
Fifth	$\log Y = 1.2621 + 0.3039 \log X$	47

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.4874 + 0.3365 \log X$	70%
Second..........	$\log Y = 1.6885 + 0.1979 \log X$	36
Third............	$\log Y = 1.4794 + 0.2418 \log X$	47
Fourth...........	$\log Y = 1.3022 + 0.2793 \log X$	62
Fifth	$\log Y = 1.3124 + 0.2624 \log X$	51

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

All of the 23 companies have an **annual executive bonus plan**; that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Eighteen (78 percent) of these companies made a bonus award for 1982 performance; all of them also paid a bonus for 1981. The five companies that did not pay a bonus for 1982, did pay a bonus for 1981 performance.

Ten (43 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Eight (35 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Nineteen (83 percent) of the companies have a **stock option plan.** Thirteen of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; two grant only ISO's, and four only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by 11 (73 percent) of the 15 companies that grant ISO's, and by nine (53 percent) of the 17 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by four (27 percent) of the 15 companies that grant ISO's. Three limit SAR's to a small group of top management (essentially, "insiders"); the other plan grants SAR's to all ISO recipients.

SAR's are provided by nine (53 percent) of the 17 companies that grant nonqualified options. Five limit SAR's to a small group of top management; the other four plans grant SAR's to all nonqualified option recipients.

Machinery (except Electrical)

This industry includes manufacturers of machinery and equipment, other than electrical equipment and transportation equipment. Machines powered by built-in or detachable motors are included, except for electrical household appliances. Portable tools, both electrical and pneumatic-powered, are included, but not hand tools. Includes office machines and computers. (SIC: 35)

The Companies

Executive compensation data for this industry were obtained from 66 companies, classified below according to 1982 sales volume. The smallest company had sales of $122 million; the largest, $34 billion.

1982 Sales	*Number of Companies*
$5 billion and over......	3
2 - 4,999 billion	9
1 - 1,999 billion	12
500 - 999 million	9
300 - 499 million	13
200 - 299 million	8
100 - 199 million	12
Total	66

Median Sales:
$488 million

Middle 50 percent:
$228 million to
$1.6 billion

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 66 companies is plotted in Chart 20. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$315,000	$228,000 to $453,000
Second	235,000	154,000 to 312,000
Third	170,000	128,000 to 238,000
Fourth	160,000	112,000 to 210,000
Fifth	133,000	99,000 to 190,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	71%	61% to 84%
Third highest..........	55	47 to 63
Fourth highest.........	47	42 to 58
Fifth highest	44	38 to 52

As the lines on Chart 21 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.6557 + 0.3025 \log X$	60%
Second...........	$\log Y = 1.4631 + 0.3166 \log X$	62
Third............	$\log Y = 1.3657 + 0.3136 \log X$	73
Fourth...........	$\log Y = 1.3192 + 0.3120 \log X$	76
Fifth	$\log Y = 1.2604 + 0.3167 \log X$	76

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

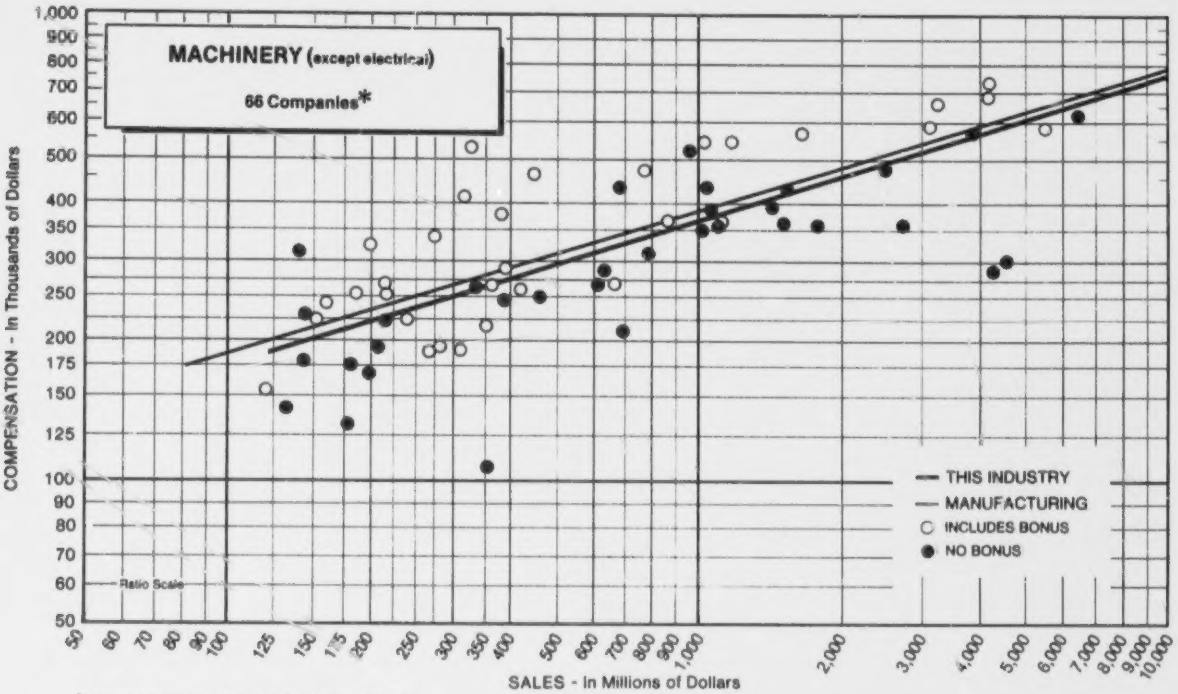
Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7596 + 0.2369 \log X$	53%
Second...........	$\log Y = 1.5811 + 0.2473 \log X$	54
Third............	$\log Y = 1.4404 + 0.2569 \log X$	66
Fourth...........	$\log Y = 1.4403 + 0.2439 \log X$	62
Fifth	$\log Y = 1.3735 + 0.2533 \log X$	68

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

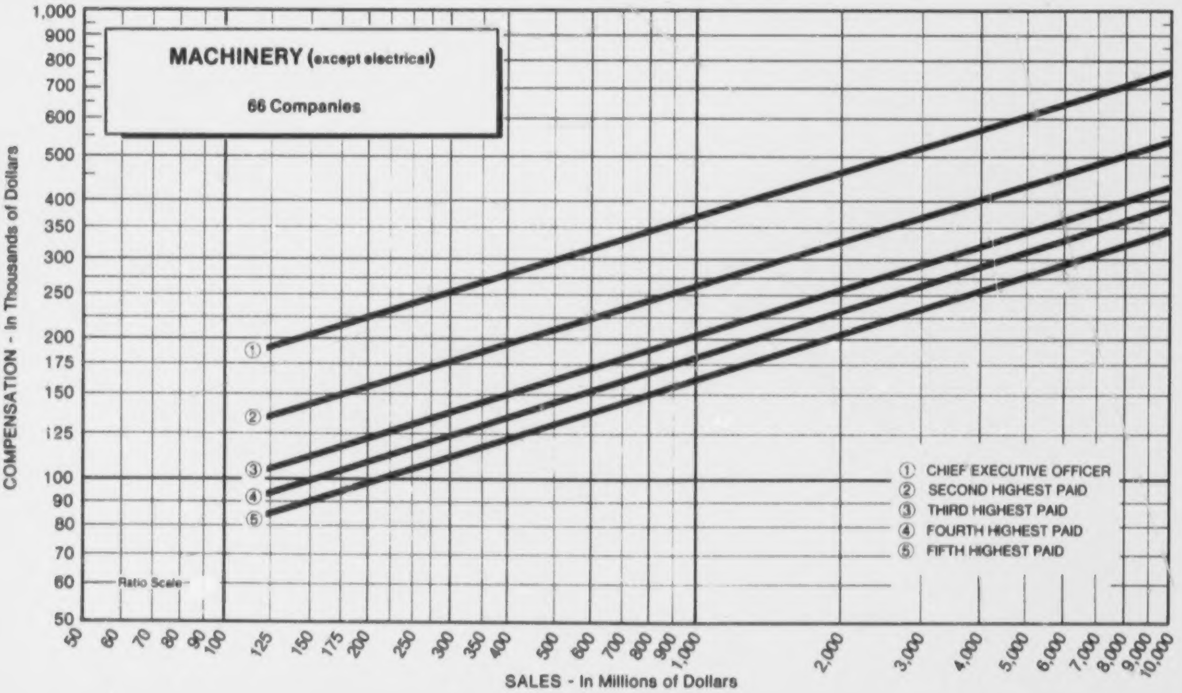
Sixty (91 percent) of the 66 companies have an **annual executive bonus plan;** that is, a plan that pays a year-end

Chart 20: Compensation of the Chief Executive, by Company Sales



*One company with sales over $10 billion not plotted

Chart 21: Compensation of the Five Highest Paid Executives, by Company Sales



bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Forty-one (68 percent) of these companies made a bonus award for 1982 performance, most (39) also paid a bonus for 1981. Among the 19 companies that did not pay a bonus for 1982, 13 paid a bonus for 1981 performance, but the other six paid no bonus in either year.

Twenty (30 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Seventeen (26 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Fifty-three (80 percent) of the companies have a **stock option plan.** Thirty-seven of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; six grant only ISO's, and ten only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by 25 (58 percent) of the 43 companies that grant ISO's, and by 28 (60 percent) of the 47 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by 16 (37 percent) of the 43 companies that grant ISO's. Most (10) limit SAR's to a small group of top management (essentially, "insiders"); the other six plans grant SAR's to all ISO recipients.

SAR's are provided by 21 (45 percent) of the 47 companies that grant nonqualified options. Most (13) limit SAR's to a small group of top management; the other eight plans grant SAR's to all nonqualified option recipients.

Electrical and Electronic Machinery, Equipment and Supplies

This industry includes manufacturers of machinery, apparatus and supplies for the generation, storage, transportation, transformation and utilization of electrical energy. Includes household appliances, but not industrial machinery powered by built-in or detachable electric motors. Includes electronic components. (SIC: 36)

The Companies

Executive compensation data for this industry were obtained from 43 companies, classified below according to 1982 sales volume. The smallest company had sales of $98 million; the largest, $26.5 billion.

1982 Sales	*Number of Companies*	
$5 billion and over	4	Median Sales:
2 - 4,999 billion	8	$441 million
1 - 1,999 billion	5	
300 - 999 million	7	Middle 50 percent:
200 - 299 million	6	$189 million to
100 - 199 million	13	$2.5 billion
Total	43	

1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

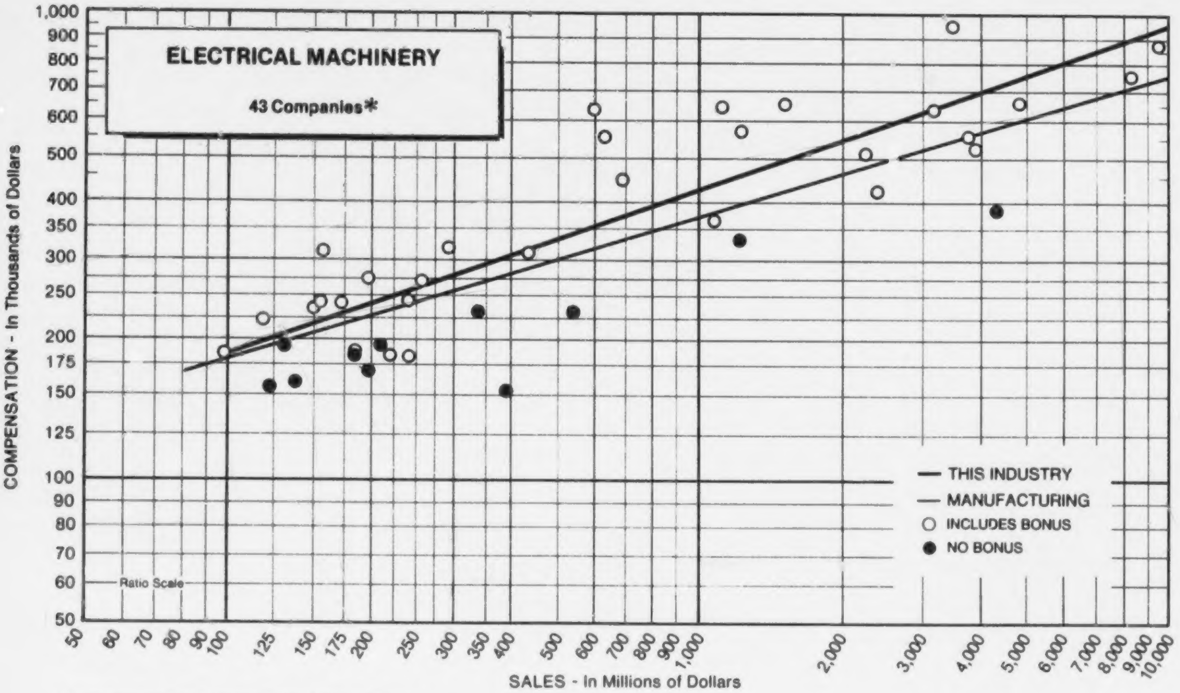
The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 43 companies is plotted in Chart 22. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$320,000	$194,000 to $626,000
Second	208,000	147,000 to 416,000
Third	165,000	117,000 to 295,000
Fourth	132,000	114,000 to 221,000
Fifth	115,000	95,000 to 203,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

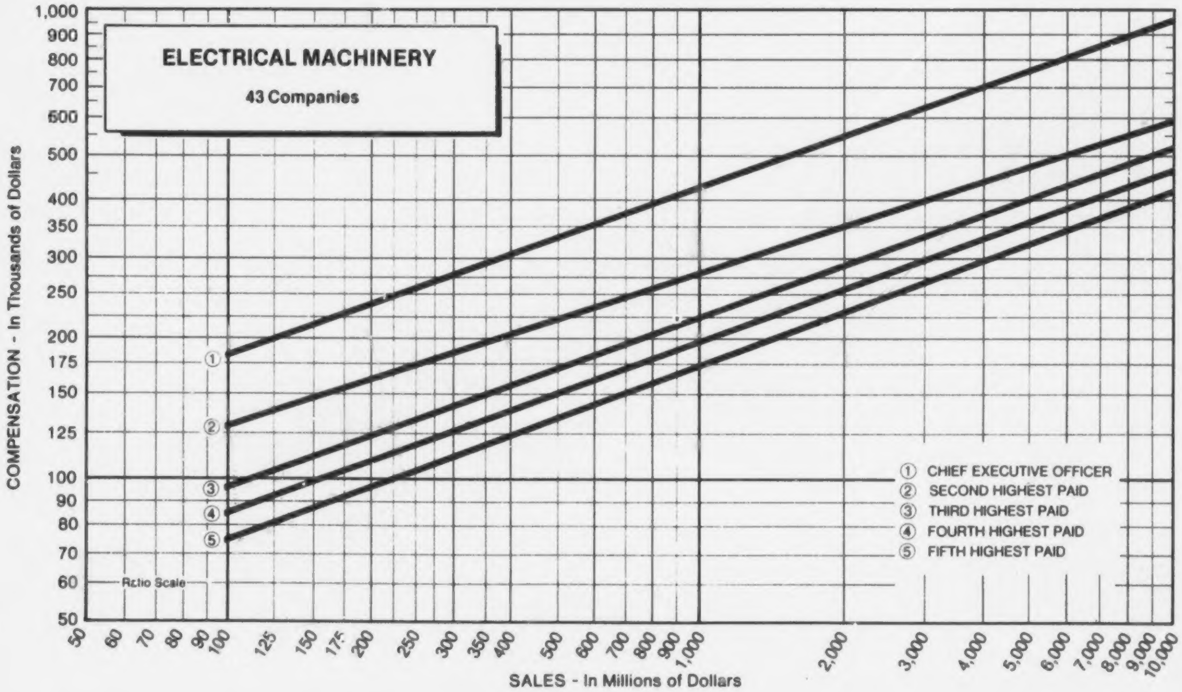
	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	69%	58% to 75%
Third highest	53	45 to 62
Fourth highest	50	39 to 56
Fifth highest	43	35 to 52

Chart 22: Compensation of the Chief Executive, by Company Sales



*Two companies with sales over $10 billion not plotted

Chart 23: Compensation of the Five Highest Paid Executives, by Company Sales



As the lines on Chart 23 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.5658 + 0.3520 \log X$	69%
Second...........	$\log Y = 1.4045 + 0.3467 \log X$	76
Third............	$\log Y = 1.2504 + 0.3644 \log X$	85
Fourth...........	$\log Y = 1.2289 + 0.3541 \log X$	84
Fifth	$\log Y = 1.1504 + 0.3628 \log X$	85

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7318 + 0.2402 \log X$	73%
Second...........	$\log Y = 1.5549 + 0.2444 \log X$	66
Third............	$\log Y = 1.4044 + 0.2616 \log X$	79
Fourth...........	$\log Y = 1.3697 + 0.2607 \log X$	81
Fifth	$\log Y = 1.3000 + 0.2693 \log X$	84

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

Forty-two (98 percent) of the 43 companies have an **annual executive bonus plan;** that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Thirty-two (76 percent) of these companies made a bonus award for 1982 performance; all but one also paid a bonus for 1981. Among the nine companies that did not pay a bonus for 1982, seven paid a bonus for 1981 performance, but the other two paid no bonus in either year.

Fourteen (33 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Ten (23 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Forty-one (95 percent) of the companies have a **stock option plan.** Twenty-five of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; ten grant only ISO's, and six only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by 26 (74 percent) of the 35 companies that grant ISO's, and by 24 (77 percent) of the 31 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by ten (29 percent) of the 35 companies that grant ISO's. Most (7) limit SAR's to a small group of top management (essentially, "insiders"); the other two plans grant SAR's to all ISO recipients.

SAR's are provided by 13 (42 percent) of the 31 companies that grant nonqualified options. Most (12) limit SAR's to a small group of top management; the other plan grants SAR's to all nonqualified option recipients.

Transportation Equipment

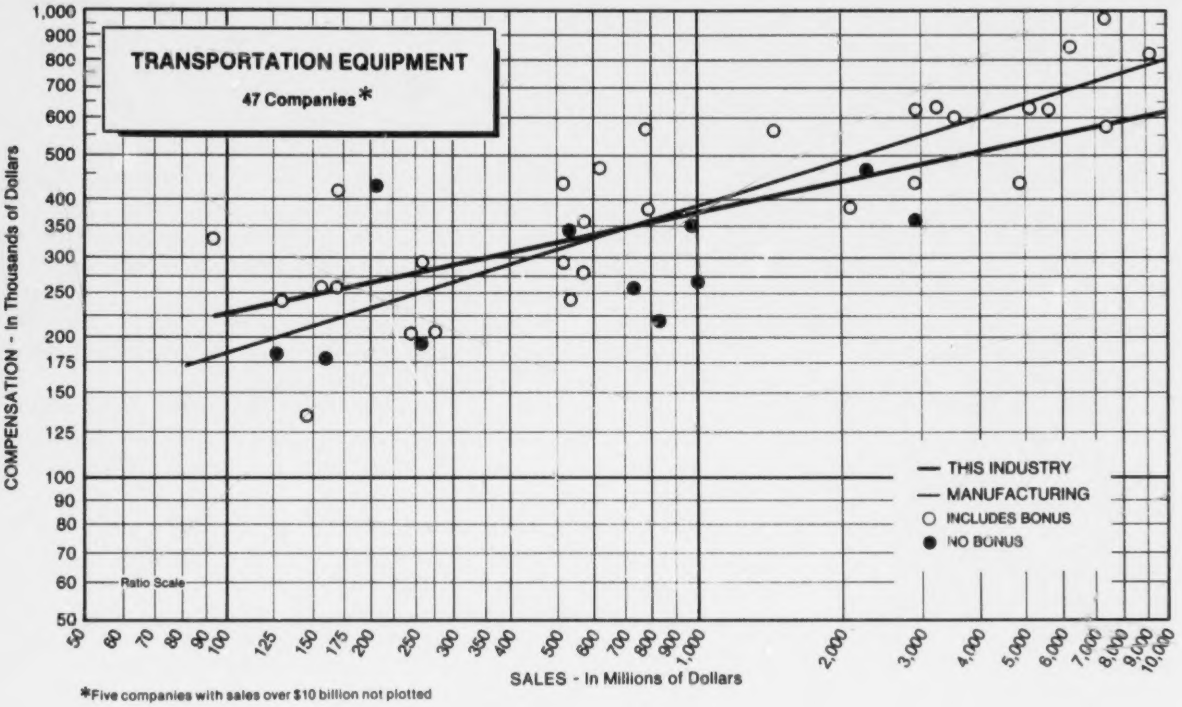
This industry includes manufacturers of equipment for transportation of passengers and cargo by land, water and air. (SIC: 37)

The Companies

Executive compensation data for this industry were obtained from 47 companies, classified below according to 1982 sales volume. The smallest company had sales of $94 million; the largest, $60 billion.

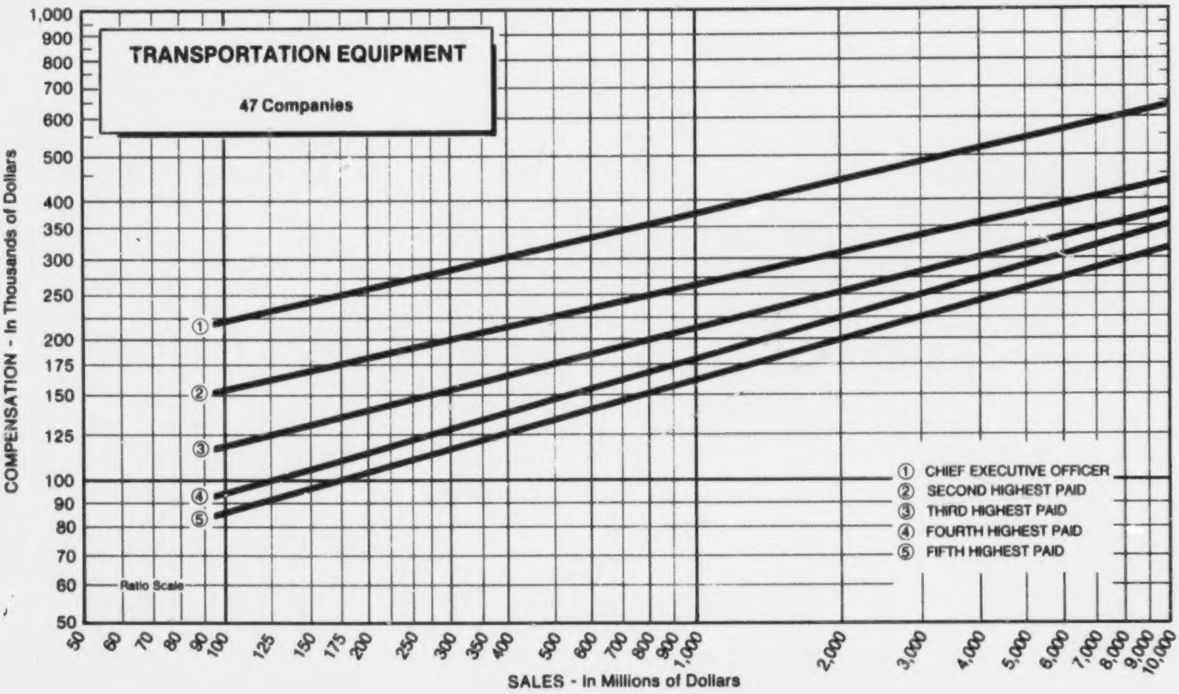
1982 Sales	*Number of Companies*	
$5 billion and over......	12	Median Sales:
1 - 4,999 billion	10	$832 million
300 - 999 million	12	Middle 50 percent:
200 - 299 million	5	$262 million to
100 - 199 million	8	$5.2 billion
Total	47	

Chart 24: Compensation of the Chief Executive, by Company Sales



*Five companies with sales over $10 billion not plotted

Chart 25: Compensation of the Five Highest Paid Executives, by Company Sales



1982 Compensation

For each manufacturer in this industry, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation of each of the chief executive officers in this particular sample of 47 companies is plotted in Chart 24. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Highest paid	$388,000	$261,000 to $579,000
Second	270,000	180,000 to 400,000
Third	230,000	135,000 to 326,000
Fourth	185,000	117,000 to 304,000
Fifth	168,000	111,000 to 266,000

The ratio of the pay of each executive to that of the chief executive officer is shown below.

	Pay as Percentage of Chief Executive's Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	70%	62% to 82%
Third highest	55	49 to 65
Fourth highest	48	42 to 60
Fifth highest	44	36 to 50

As the lines on Chart 25 illustrate, the total compensation of each of the five groups of executives is related positively to company sales volume. The regression formula for each of these lines is shown below. Also shown is the "coefficient of determination" (r^2) which measures the percentage of the variation in compensation that is explained statistically by the variation in sales volume.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.9066 + 0.2210 \log X$	56%
Second	$\log Y = 1.7296 + 0.2288 \log X$	63
Third	$\log Y = 1.5791 + 0.2472 \log X$	64
Fourth	$\log Y = 1.4302 + 0.2743 \log X$	70
Fifth	$\log Y = 1.4008 + 0.2676 \log X$	66

In each case, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.

Base salary of the top-paid executives also is related to sales volume. The regression equation for each of the five executives is shown below, along with the "coefficient of determination."

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.8833 + 0.1932 \log X$	62%
Second	$\log Y = 1.6883 + 0.2058 \log X$	68
Third	$\log Y = 1.5506 + 0.2204 \log X$	68
Fourth	$\log Y = 1.3805 + 0.2570 \log X$	78
Fifth	$\log Y = 1.3696 + 0.2448 \log X$	72

Again, Y is salary stated in *thousands* of dollars and X is sales volume stated in *millions* of dollars.

Executive Incentive Plans

All of the 47 companies have an **annual executive bonus plan**; that is, a plan that pays a year-end bonus based on that year's performance. (For an analysis of 1982 bonus awards, see page 10.)

Thirty-seven (79 percent) of these companies made a bonus award for 1982 performance; most (34) also paid a bonus for 1981. Among the ten companies that did not pay a bonus for 1982, six paid a bonus for 1981 performance, but the other four paid no bonus in either year.

Ten (21 percent) of the companies have an executive incentive plan that is based on long-term corporate performance goals, usually called **performance share or performance unit plans.** (For a description of payouts during 1982, see page 12.)

Fifteen (32 percent) of the companies have a **restricted stock plan** under which grants of company stock are subject to forfeiture until earned out through continued employment.

Forty-one (87 percent) of the companies have a **stock option plan.** Thirty-one of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; five grant only ISO's, and five only nonqualified options. (For an analysis of the size of grants made during 1982, see page 13.)

Stock-for-stock exercise (stock swaps) are provided for by 25 (69 percent) of the 36 companies that grant ISO's, and by 20 (56 percent) of the 36 companies that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by 16 (44 percent) of the 36 companies that grant ISO's. Eight limit SAR's to a small group of top management (essentially, "insiders"); the other eight plans grant SAR's to all ISO recipients.

SAR's are provided by 17 (47 percent) of the 36 companies that grant nonqualified options. Most (10) limit SAR's to a small group of top management; the other seven plans grant SAR's to all nonqualified option recipients.

Chapter 4

Retail Trade

INFORMATION ABOUT THE 1982 compensation of their five highest paid executives was obtained from 92 retailers, 25 percent of approximately all retailers with sales of $50 million or more. These 92 retailers are classified below according to 1982 sales volume.

	Retailers	
1982 Sales	*Number*	*Percent*
$3 billion and over	15	16%
1 - 2,999 billion	15	16
500 - 999 million	12	13
300 - 499 million	16	18
200 - 299 million	12	13
50 - 199 million	22	24
Total	92	100%

Median sales volume is $445 million, with the middle half of retailers ranging between $220 million and $1.1 billion.

Compensation Changes

On the average, total compensation for 1982 (which includes bonus awards) was 7 percent greater than in 1981 for top executives in these retail firms. For example, in a sample of chief executive officers for whom both 1981 and 1982 total compensation was available, the median change was an increase of 7 percent with the middle half ranging between no change and an increase of 17 percent.

About the same proportion (58 percent) of these retailers made bonus awards for 1982 performance as for 1981, although the size of the awards, as a percentage of base salary, was off somewhat.

Base salaries for 1982 were up 8 percent over 1981, a sharp drop in the rate of salary increases. Salary increases for the chief executive officer position averaged about 13 percent during 1980 and 1981.[1]

		Percentage Increase in Salary	
Year	*Number of Companies*	*Median*	*Middle 50 Percent Range*
1982	58	8%	0% to 15%
1979 - 1981	47	26	15 to 34
1977 - 1979	48	20	9 to 40
1975 - 1977	60	18	3 to 32
1973 - 1975	56	13	2 to 25

1982 Total Compensation

For each retailer, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation paid to each of the chief executive officers in this particular sample of 92 retailers is shown in Chart 26.

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[1] The 1979-1981 changes are from Harland Fox, *Top Executive Compensation 1982 Edition.* The Conference Board, Report No. 827, 1982, p. 44. The 1977-1979 changes are from *Top Executive Compensation 1980 Edition.* The Conference Board, Report 793, 1980, p. 46. The 1975-1977 changes are from *Top Executive Compensation 1978 Edition.* The Conference Board, Report No. 753, 1978, p. 56. The 1973-1975 changes are from *Top Executive Compenstion 1976 Edition.* The Conference Board, Report No. 706, 1976, p. 51.

Chart 26: Compensation of the Chief Executive, by Company Sales

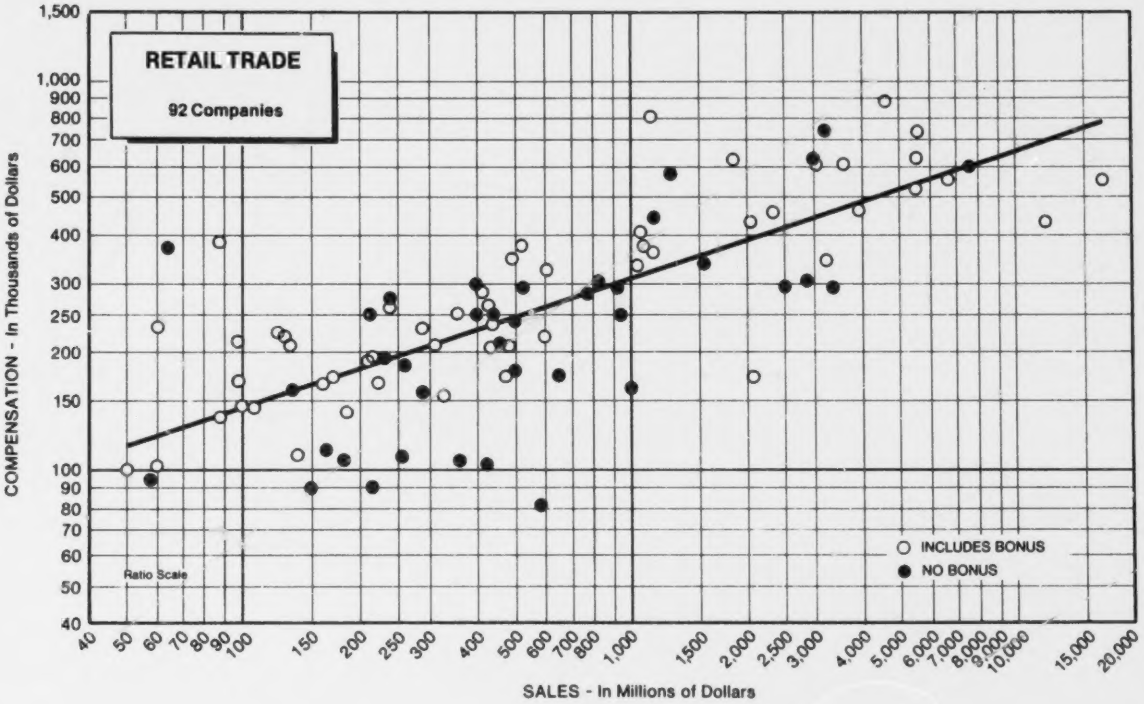
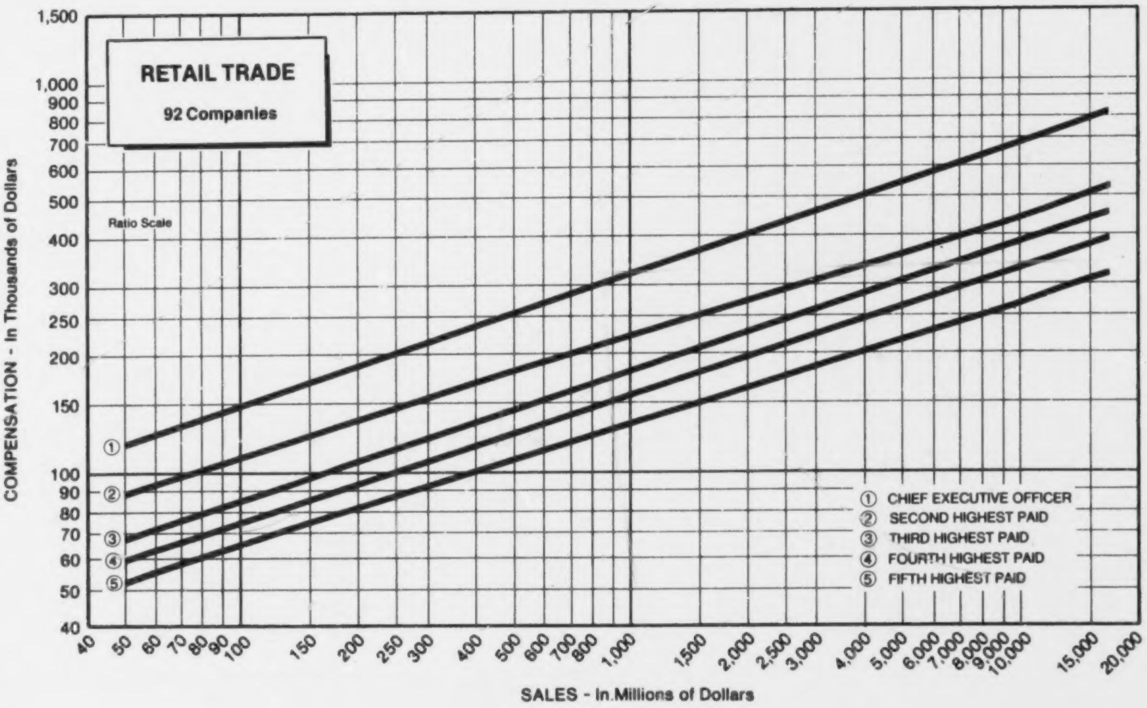


Chart 27: Compensation of the Five Highest Paid Executives, by Company Sales



The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

	1982 Total Compensation	
Compensation Rank	Median	Middle 50 Percent Range
Highest paid	$250,000	$167,000 to $375,000
Second	162,000	122,000 to 281,000
Third	135,000	92,000 to 237,000
Fourth	110,000	79,000 to 201,000
Fifth	100,000	70,000 to 156,000

As the lines in Chart 27 suggest, there is a positive relationship between the level of total compensation and sales volume for all five executives. The correlation coefficients for the five lines are, respectively: .72, .70, .74, .76, and .77.

The regression lines on the chart can be used to determine the average compensation of an executive at any level of sales, either by a direct reading from the chart or by using the regression formulas below. (In these formulas, Y is total compensation stated in *thousands* of dollars, and X is sales volume stated in *millions* of dollars.)

Compensation Rank	Regression Formula	r^2
Highest paid	$\log Y = 1.5346 + 0.3197 \log X$	52%
Second	$\log Y = 1.4467 + 0.2998 \log X$	49
Third	$\log Y = 1.2788 + 0.3237 \log X$	55
Fourth	$\log Y = 1.2012 + 0.3299 \log X$	58
Fifth	$\log Y = 1.1438 + 0.3313 \log X$	60

Although total compensation and sales are highly related, company size is not the sole determinant of compensation level. As the "coefficients of determination" (r^2) above indicate, the variation in sales statistically explains 49 to 60 percent of the variation in total compensation of the five top-paid executives. (This coefficient is the square of the correlation coefficient.)

The ratio of the total compensation of each executive to that of the chief executive officer is shown below.

	Total Compensation as a Percentage of Chief Executive's Total Compensation	
Compensation Rank	Median	Middle 50 Percent Range
Second highest	78%	60% to 85%
Third highest	62	46 to 70
Fourth highest	53	40 to 63
Fifth highest	44	34 to 58

1982 Salary

There is also a positive relationship between base salary and sales volume. The regression equations for the five top-paid executives are shown below. (Y is salary stated in *thousands* of dollars; X is sales volume stated in *millions* of dollars.)

Compensation Rank	Regression Formula	r^2
Highest paid	$\log Y = 1.4987 + 0.3005 \log X$	55%
Second	$\log Y = 1.3796 + 0.2945 \log X$	50
Third	$\log Y = 1.2574 + 0.3025 \log X$	52
Fourth	$\log Y = 1.1477 + 0.3216 \log X$	57
Fifth	$\log Y = 1.1554 + 0.3008 \log X$	53

As the coefficients of determination (r^2) above indicate, the variation in sales statistically explains 50 to 57 percent of the variation in base salary.

The ratio of the salary of each executive to the salary of the chief executive officer is shown below:

	Salary as a Percentage of Chief Executive's Salary	
Compensation Rank	Median	Middle 50 Percent Range
Second highest	78%	60% to 85%
Third highest	60	48 to 71
Fourth highest	53	40 to 65
Fifth highest	45	36 to 59

These ratios are practically the same as the total compensation ratios.

1982 Bonus Awards

Sixty-six (72 percent) of the 92 retailers have an "annual" executive bonus plan; that is, a plan that pays a year-end bonus based on that year's corporate performance. These plans have become more common among retailers over the past decade; in 1972 only half of a comparable group of retailers had an annual incentive plan.[2] There is no particular relationship between the prevalence of these plans and the size of the company.

Eighty percent (53) of the 66 retailers with a bonus plan made an award for 1972 performance; 80 percent also paid a bonus for 1981. Among the 53 companies that paid a 1982 bonus, most (46) also paid an award for 1981, but seven did not. Among the 13 companies that paid no bonus for 1982, seven paid a 1981 bonus and six paid no bonus in either year.

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[2] *Top Executive Compensation 1972 Edition.* (out of print). The Conference Board, Report No. 573, 1972, p. 53.

Table 5: 1982 Bonus Awards and 1981 Median Bonus

1982 Bonus Award (Percent of Salary)	Chief Executives Number	Chief Executives Percent	Second Highest Paid Number	Second Highest Paid Percent	Third Highest Paid Number	Third Highest Paid Percent	Fourth Highest Paid Number	Fourth Highest Paid Percent	Fifth Highest Paid Number	Fifth Highest Paid Percent
100% or more	4	8%	3	6%	5	9%	4	8%	3	6%
75 - 99	6	11	3	6	1	2	1	2	1	2
50 - 74	8	15	11	21	6	11	8	15	5	9
40 - 49	11	21	5	9	7	13	6	11	8	15
30 - 39	2	4	9	17	11	20	10	19	12	22
20 - 29	8	15	8	15	9	18	8	15	7	13
10 - 19	8	15	8	15	11	20	8	15	12	22
Less than 10%	6	11	6	11	4	7	8	15	6	11
Total	53	100%	53	100%	54	100%	53	100%	54	100%
Median Bonus	41%		32%		31%		31%		30%	
Middle 50% Range	19 - 59%		19 - 50%		19 - 48%		15 - 48%		15 - 41%	
Median Salary	$190,000		$140,000		$99,000		$93,000		$83,000	
1981 Median Bonus	**40%**		**40%**		**36%**		**36%**		**33%**	

The median award for 1982 performance for 267 executives is 32 percent of base salary, with the middle half ranging from 18 to 50 percent of salary. As Table 5 indicates, the median award for chief executive officers (42 percent of salary) is considerably higher than that of the other four executives (30 to 32 percent of salary). Compared with bonus awards for 1981, the 1982 medians are 3 to 8 percentage points lower, except for the chief executive.[3]

For each of the five executives the bonus award as a percentage of salary increases with company size (Table 6).[4] Again, the 1982 medians at each size level are lower than in 1981.[5]

Long-term Incentive Plans

Twenty-three (25 percent) of the 92 retailers have a **restricted stock plan** under which contingent grants of company stock are made, subject to restrictions and forfeitures, until earned out by continued employment over a specified period of time. This is about the same proportion of retailers that had a plan three years ago; 19 percent (17) of 90 retailers reported a plan in 1980.[6]

Restricted stock plans are more common as company size increases. For example, 40 percent of the 15 retailers with sales of $3 billion or more have a plan compared with 26 percent of the 43 companies with sales in the $300 million to $3 billion range, and 18 percent of the 34 retailers with sales in the $50 million to $300 million range.

Table 6: 1982 and 1981 Bonus Awards (as Percent of Salary), by Company Size

Executive	Sales Volume $180 Million	Sales Volume $425 Million	Sales Volume $1.4 Billion
Chief Executive			
1982 Bonus (%)	40%	43%	46%
Salary	$146,000	$190,000	$273,000
1981 Bonus (%)	46%	48%	53%
Second Highest Paid			
1982 Bonus (%)	39%	39%	40%
Salary	$108,000	$140,000	$199,000
1981 Bonus (%)	43%	45%	48%
Third Highest Paid			
1982 Bonus (%)	33%	37%	41%
Salary	$85,000	$109,000	$155,000
1981 Bonus (%)	39%	39%	43%
Fourth Highest Paid			
1982 Bonus (%)	33%	35%	38%
Salary	$74,000	$96,000	$139,000
1981 Bonus (%)	37%	38%	41%
Fifth Highest Paid			
1982 Bonus (%)	25%	30%	35%
Salary	$71,000	$90,000	$126,000
1981 Bonus (%)	33%	34%	35%

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[3] *Top Executive Compensation 1982 Edition,* p. 45.

[4] Data are derived from regression equations based on the pay of executives in 52 companies with a bonus plan that paid a bonus. The equations are shown below; the coefficient of determination is shown in parentheses.

Total Compensation

Highest paid	$\log Y = 1.5755 + 0.3259 \log X$	(60%)
Second	$\log Y = 1.5017 + 0.2996 \log X$	(56%)
Third	$\log Y = 1.3361 + 0.3190 \log X$	(61%)
Fourth	$\log Y = 1.2659 + 0.3231 \log X$	(64%)
Fifth	$\log Y = 1.2155 + 0.3251 \log X$	(67%)

Base Salary

Highest paid	$\log Y = 1.4805 + 0.3037 \log X$	(66%)
Second	$\log Y = 1.3669 + 0.2961 \log X$	(57%)
Third	$\log Y = 1.2623 + 0.2949 \log X$	(59%)
Fourth	$\log Y = 1.1700 + 0.3089 \log X$	(60%)
Fifth	$\log Y = 1.2120 + 0.2828 \log X$	(58%)

[5] *Top Executive Compensation 1982 Edition,* p. 45.

[6] *Top Executive Compensation 1980 Edition,* p. 45. See also, Carol Meyers Edelstein, "Long-term Incentives for Management, Part 4: Restricted Stock." *Compensation Review,* First Quarter, 1981, p. 30.

Eleven (12 percent) of the 92 retailers have an executive incentive plan based on the achievement of long-term corporate financial goals, usually called a **performance share or unit plan.**[7] All are in companies with $300 million or more in sales, including 6 (14 percent) of the 43 companies with sales of $300 million to $3 billion, and five of the fifteen companies with sales of $3 billion or more. In 1978, only 3 percent of 88 retailers reported a plan.[8]

Seven retailers made a payment during 1982 under these plans to at least one of the five top-paid executives. Payments to each of these 32 executives, converted to a percentage of 1982 salary, ranged from one to 179 percent, with the median payment representing 43 percent of base salary, and the middle 50 percent between 28 and 72 percent.

Almost two-thirds (58) of the 92 retailers have a **stock option plan.**[9] These plans are more common among the largest retailers; for example, 87 percent of the companies with sales over $1 billion have a plan compared with 58 percent of the companies with sales of $200 million to $1 billion, and 41 percent of the retailers with sales in the $50 million to $200 million range.

Among the 58 companies with a stock option plan, half (29) provide for grants of *both* incentive stock options (ISO's) and nonqualified options; twenty plans grant only ISO's, and nine only nonqualified options.

Twenty-five of the 58 retailers with a plan made a regular grant of stock options during 1982. Nine of the companies granted *only* ISO's, three *only* nonqualified options, and 13 granted *both* ISO's and nonqualified options. Among the 13 plans that granted both ISO's and nonqualified options, eight limited nonqualified options to those executives who hit the $100,000 limit on ISO grants.

Twenty of the 58 retailers that granted options in 1982 provided information about the value of the option for one or more of their five top-paid executives. (The value of an option is the number of shares multiplied by the market price at the time of grant.) The median value of options for 92 executives is the equivalent of 52 percent of base salary, with the middle half ranging between 42 and 75 percent of 1982 base salary.

Stock-for-stock exercise (stock swaps) are provided for by 20 (41 percent) of the 49 plans that grant ISO's, and by half of the 38 plans that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by 15 (31 percent) of the 49 plans that grant ISO's. Most (11) limit SAR's to a small group of top management (essentially "insiders"); the other four plans grant SAR's to all ISO recipients. SAR's are provided by 15 (39 percent) of the 38 plans that grant nonqualified options. Most (12) limit SAR's to a small group of top management; the other three plans grant SAR's to all nonqualified option recipients.

[7] For an analysis of these plans, see Laurence C. Bickford, "Long-term Incentives for Management Part 6: Performance Attainment Plans." *Compensation Review,* Third Quarter, 1981, p. 18; and Harland Fox, *Executive Incentives: Long-term Performance Share/Unit Plans.* The Conference Board, Research Bulletin No. 132, 1983.

[8] *Top Executive Compensation 1978 Edition,* p. 55.

[9] For an analysis of 189 ISO plans, see Harland Fox, *Incentive Stock Option Plans.* The Conference Board, Research Bulletin No. 148, 1983.

Chapter 5

Gas and Electric Utilities

INFORMATION ABOUT THE 1982 compensation of their five highest paid executives was obtained from 92 gas and electric utilities, 79 percent of the gas and electric utilities with securities listed on the New York Stock Exchange. The 92 utilities are classified below according to 1982 operating revenue.

1982 Operating Revenue	*Utilities*	
	Number	*Percent*
$3 billion and over	13	14%
2 - 2,999 billion	9	10
1 - 1,999 billion	24	26
500 - 999 million	18	20
400 - 499 million	15	16
100 - 399 million	13	14
Total	92	100%

Median operating revenue was $973 million, with the middle half of the utilities ranging between $478 million and $1.8 billion.

Compensation Changes

On the average, total compensation for 1982 (which includes bonus awards) was 10 percent greater than in 1981 for top executives in these gas and electric utilities. For example, in a sample of 75 chief executive officers for whom both 1981 and 1982 total compensation were available, the median increase was 10 percent, with the middle half ranging from 7 percent to 16 percent.

About the same proportion (20 percent) of these utilities made bonus awards for 1982 performance as for 1981, although the size of the awards, as a percentage of base salary, was about the same in both years.

Base salaries for 1982 were up 10 percent over 1981, a drop in the rate of salary increases. Salary increases for the chief executive officer position averaged about 12 percent during 1980 and 1981.[1]

Year	*Number of Companies*	*Percentage Increase in Salary*	
		Median	*Middle 50 Percent Range*
1982	75	10%	7% to 16%
1979 - 1981	78	24	18 to 33
1977 - 1979	99	17	8 to 25
1975 - 1977	103	18	9 to 25
1973 - 1975	93	11	1 to 18

1982 Total Compensation

For each gas and electric utility, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation paid to each of the chief executive officers in this particular sample of 92 utilities is shown in Chart 28. The median and middle 50 percent range of the pay of these

[1] The 1979-1981 changes are from *Top Executive Compensation 1982 Edition*. The Conference Board, Report No. 827, 1982, p. 49. The 1977-1979 changes are from *Top Executive Compensation 1980 Edition*. The Conference Board, Report 793, 1980, p. 50. The 1975-1977 changes are from *Top Executive Compensation 1978 Edition*. The Conference Board, Report No. 753, 1978, p. 61. The 1973-1975 changes are from *Top Executive Compenstion 1976 Edition*. The Conference Board, Report No. 706, 1976, p. 55.

Chart 28: Compensation of the Chief Executive, by Operating Revenue

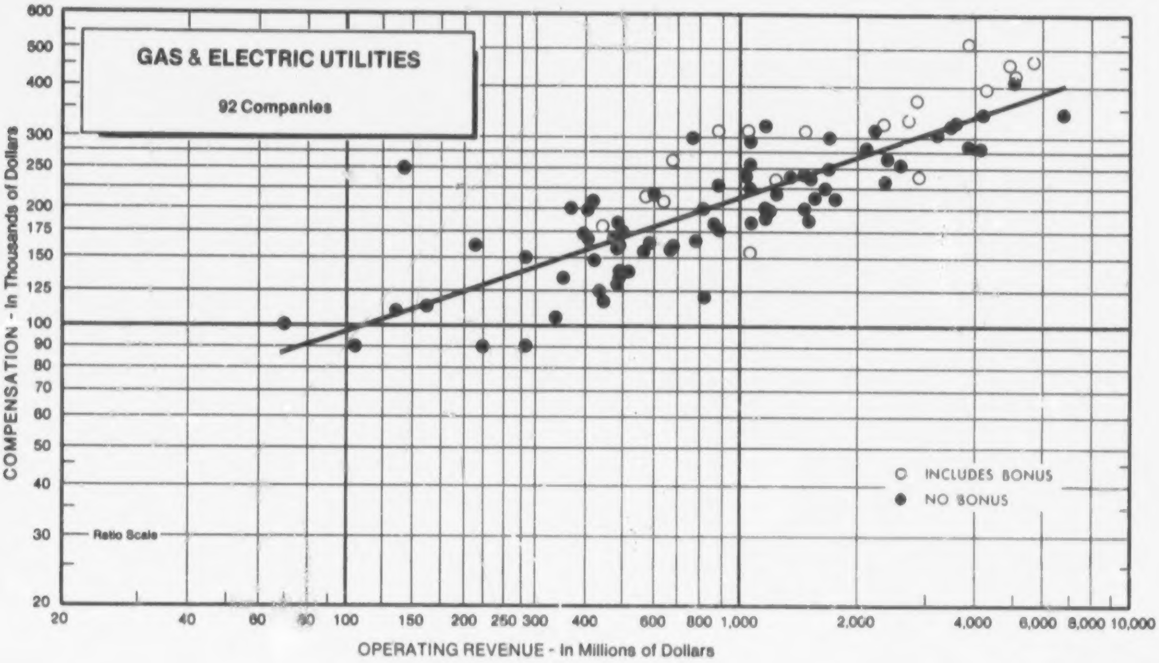
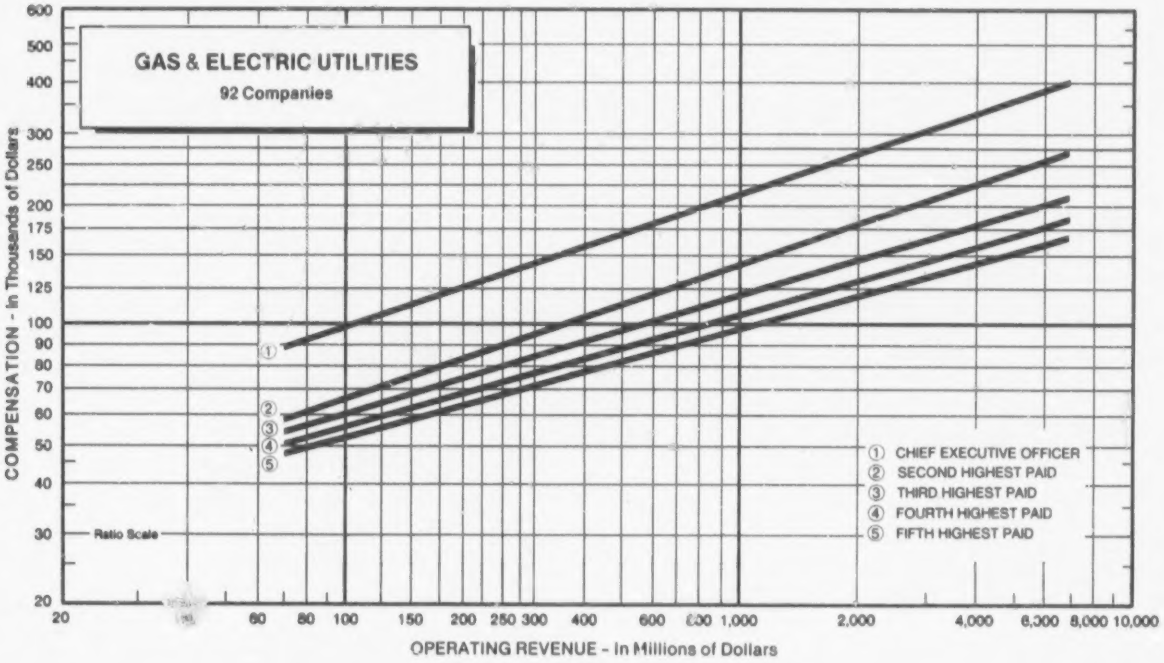


Chart 29: Compensation of the Five Highest Paid Executives, by Operating Revenue



chief executive officers and the other four executives are shown below.

Compensation Rank	1982 Total Compensation	
	Median	Middle 50 Percent Range
Highest paid	$210,000	$160,000 to $280,000
Second	135,000	108,000 to 192,000
Third	116,000	90,000 to 156,000
Fourth	104,000	82,000 to 134,000
Fifth	95,000	79,000 to 121,000

As the lines in Chart 29 suggest, there is a positive relationship between the level of total compensation and operating revenue for all five executives. The correlation coefficients for the five lines are, respectively: .86, .80, .80, .82, and .83.

The regression lines on the chart can be used to determine the average compensation of an executive at any level of operating revenue, either by a direct reading from the chart or by using the regression formulas below. (In these formulas, Y is total compensation stated in *thousands* of dollars, and X is operating revenue stated in *millions* of dollars.)

Compensation Rank	Regression Formula	r^2
Highest paid	$\log Y = 1.3268 + 0.3345 \log X$	70%
Second	$\log Y = 1.1676 + 0.3273 \log X$	64
Third	$\log Y = 1.2207 + 0.2856 \log X$	63
Fourth	$\log Y = 1.2093 + 0.2749 \log X$	68
Fifth	$\log Y = 1.1906 + 0.2684 \log X$	69

Although total compensation and operating revenue are highly related, company size is not the sole determinant of compensation level. As the "coefficients of determination" (r^2) above indicate, the variation in operating revenue statistically explains 63 to 70 percent of the variation in total compensation of the five top-paid executives. (This coefficient is the square of the correlation coefficient.)

The ratio of the total compensation of each executive to that of the chief executive officer is shown below.

Compensation Rank	Total Compensation as a Percentage of Chief Executive's Total Compensation	
	Median	Middle 50 Percent Range
Second highest	68%	58% to 72%
Third highest	55	50 to 62
Fourth highest	51	46 to 55
Fifth highest	46	40 to 51

1982 Salary

There is also a positive relationship between base salary and operating revenue. The regression equations for the five top-paid executives are shown below. (Y is salary stated in *thousands* of dollars; X is operating revenue stated in *millions* of dollars.)

Compensation Rank	Regression Formula	r^2
Highest paid	$\log Y = 1.3965 + 0.3052 \log X$	69%
Second	$\log Y = 1.2365 + 0.2988 \log X$	64
Third	$\log Y = 1.2917 + 0.2571 \log X$	61
Fourth	$\log Y = 1.2812 + 0.2453 \log X$	65
Fifth	$\log Y = 1.2497 + 0.2440 \log X$	67

As the coefficients of determination (r^2) above indicate, the variation in operating revenue statistically explains 61 to 69 percent of the variation in base salary.

The ratio of the salary of each executive to the salary of the chief executive officer is shown below:

Compensation Rank	Salary as a Percentage of Chief Executive's Salary	
	Median	Middle 50 Percent Range
Second highest	68%	58% to 72%
Third highest	56	50 to 63
Fourth highest	51	45 to 55
Fifth highest	46	41 to 52

These ratios are practically the same as the total compensation ratios.

1982 Bonus Awards

Thirty (33 percent) of the 92 gas and electric utilities have an "annual" executive bonus plan; that is, a plan that pays a year-end bonus based on that year's corporate performance. These plans have become much more common among gas and electric utilities over the past decade; in 1972 only 8 percent of a comparable group of 115 utilities had an annual incentive plan, and, in 1980, only 13 percent.[1]

Eighteen (72 percent) of the 25 utilities with a bonus plan made an award for 1982 performance; 17 paid a bonus for 1981. (Five plans that were adopted in 1983 are excluded.)

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[1] *Top Executive Compensation 1972 Edition.* (out of print). The Conference Board, Report No. 573, 1972, p. 58; and *Top Executive Compensation 1980 Edition.* p. 49.

Among the 18 companies that paid a 1982 bonus, 13 also paid an award for 1981, but five did not. Among the seven plans that paid no bonus for 1982, four paid a 1981 bonus and three paid no bonus in either year.

The 1982 bonus award was reported for 89 of the five top-paid executives in 18 companies that paid a bonus. The median bonus is 20 percent of salary with the middle half ranging between 10 and 29 percent of base pay. (In 1981, the median bonus was 22 percent of salary for the five top-paid combined.)[3]

Long-term Incentive Plans

Five (5 percent) of the 92 utilities have a **restricted stock plan** under which contingent grants of company stock are made, subject to restrictions and forfeitures, until earned out by continued employment over a specified period of time. This is about the same proportion of utilities that had a plan three years ago; four (4 percent) of 106 companies reported a plan in 1980.[4]

Five (5 percent) of the gas and electric utilities have an executive incentive plan based on the achievement of long-term corporate financial goals, usually called a **performance share or unit plan.**[5] All plans are in companies with $500 million or more in operating revenue. In 1978, only one of 118 comparable utilities had a plan.[6]

Eighteen (20 percent) of the companies have a **stock option plan.**[7] Eleven of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; five grant only ISO's, and two have only nonqualified options.

Ten of the eighteen gas and electric utilities with a plan made a regular grant of stock options during 1982. Three of the plans granted *only* ISO's; two *only* nonqualified options; and five granted *both* ISO's and nonqualified options. Among the five plans that granted both ISO's and nonqualified options, four limited nonqualified options to those executives who hit the $100,000 limit on ISO grants.

All of the ten utilities that granted options in 1982 provided information about the value of the option for one or more of their five top-paid executives. (The value of an option is the number of shares multiplied by the market price at the time of grant.) The median value of options for 45 executives is the equivalent of 72 percent of base salary, with the middle half ranging between 46 and 100 percent of 1982 salary.

Stock-for-stock exercise (stock swaps) are provided for by six (38 percent) of the 16 plans that grant ISO's, and by four (31 percent) of the 13 plans that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by three of the sixteen plans that grant ISO's. One of these limits SAR's to a small group of top management (essentially "insiders"); the other two grant SAR's to all option recipients. SAR's are provided by four of the thirteen plans that grant nonqualified options; one limits SAR's to a limited group of top executives; the other three grant SAR's to all nonqualified option recipients.

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[3] *Top Executive Compensation 1982 Edition*, p. 45.

[4] *Top Executive Compensation 1980 Edition*, p. 40. See also, Carol Meyers Edelstein, "Long-term Incentives for Management, Part 4: Restricted Stock." *Compensation Review*, First Quarter, 1981, p. 30.

[5] For an analysis of these plans, see Laurence C. Bickford, "Long-term Incentives for Management, Part 6: Performance Attainment Plans." *Compensation Review*, Third Quarter, 1981, p. 18; and Harland Fox, *Executive Incentives: Long-term Performance Share/Unit Plans*. The Conference Board, Research Bulletin No. 132, 1983.

[6] *Top Executive Compensation 1978 Edition*, p. 61.

[7] For an analysis of 189 ISO plans, see Harland Fox, *Incentive Stock Option Plans*. The Conference Board, Research Bulletin No. 148, 1983.

Chapter 6

Commercial Banking

INFORMATION ABOUT THE 1982 compensation of their five highest paid executives was obtained from 227 commercial banks, 51 percent of approximately all commercial banks with total deposits of $300 million or more. These 227 banks are classified below according to total deposits at the end of 1982.

	Banks	
Total Deposits	*Number*	*Percent*
$5 billion and over	26	11%
2 - 4,999 billion	43	19
1 - 1,999 billion	43	19
600 - 999 million	43	19
500 - 599 million	24	11
300 - 499 million	48	21
Total	227	100%

Median total deposits are $974 million, with deposits of the middle half of the banks ranging between $550 million and $2.5 billion.

Compensation Changes

On the average, total compensation for top executives in these banks for 1982 (which includes bonus awards) was 10 percent greater than in 1981. For example, in a sample of 180 chief executive officers for whom both 1981 and 1982 total compensation was available, the median increase was 10 percent with the middle half ranging from no change to a 24 percent increase.

About the same proportion (57 percent) of these banks made bonus awards for 1982 performance as for 1981 and the size of the awards, as a percentage of base salary, was essentially the same in both years.

Base salaries in 1982 were up 10 percent over 1981, a drop in the rate of salary increases. Salary increases for the chief executive officer position averaged about 13.5 percent during 1980 and 1981.[1]

		Percentage Increase in Salary	
Year	*Number of Banks*	*Median*	*Middle 50 Percent Range*
1982	180	10%	7% to 19%
1979 - 1981	140	27	15 to 40
1977 - 1979	199	22	15 to 31
1975 - 1977	213	17	7 to 26
1973 - 1975	159	17	6 to 25

1982 Total Compensation

For each commercial bank, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation paid to each of the chief executive officers in this particular sample of 227 banks is shown in Chart 30. The

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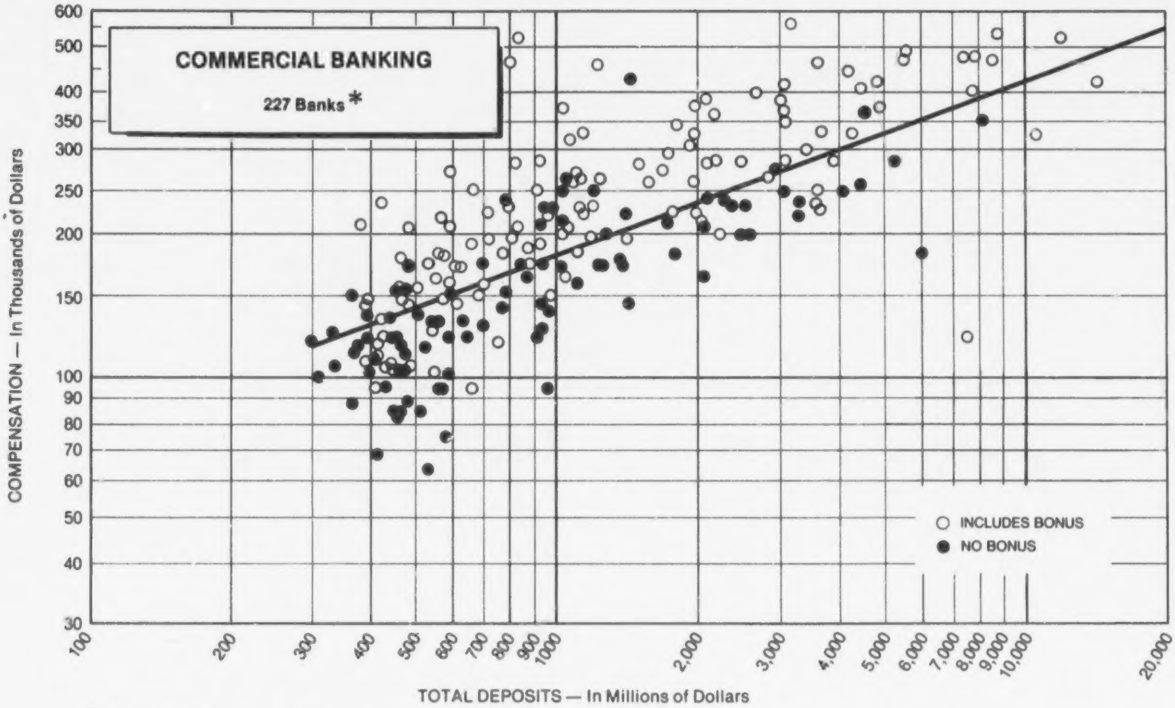
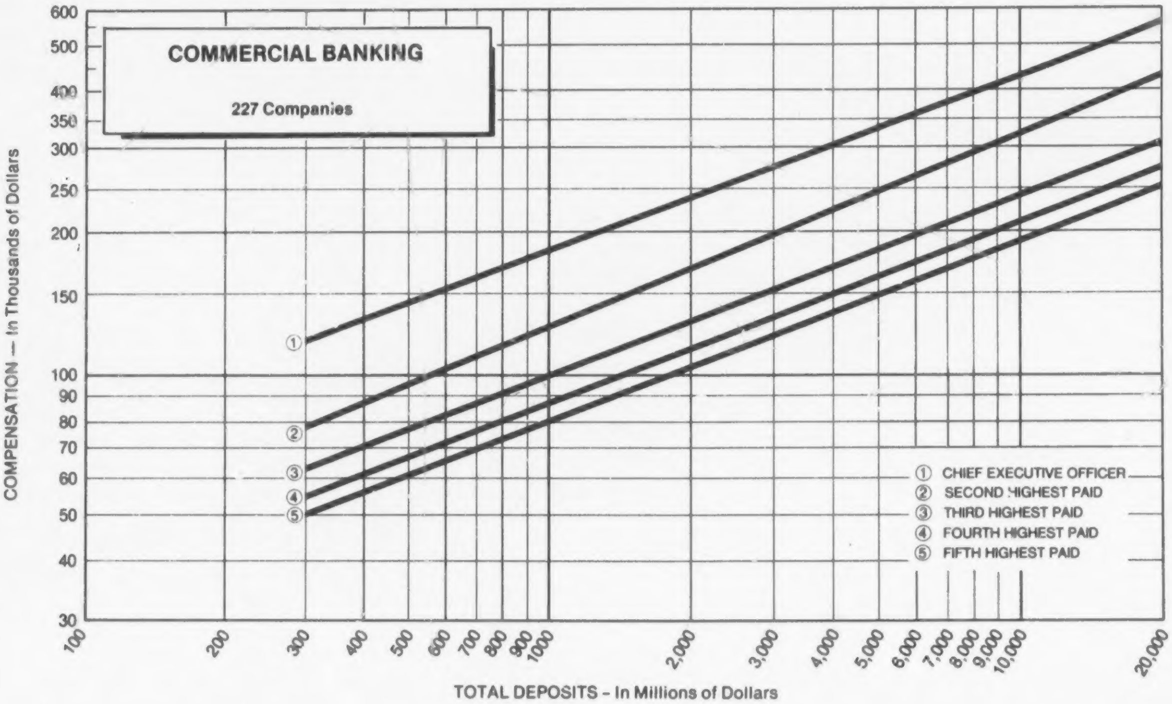
[1] The 1979-1981 changes are from Harland Fox, *Top Executive Compensation 1982 Edition*. The Conference Board, Report No. 827, 1982, p. 53. The 1977-1979 changes are from *Top Executive Compensation 1980 Edition*. The Conference Board, Report 793, 1980, p. 55. The 1975-1977 changes are from *Top Executive Compensation 1978 Edition*. The Conference Board, Report No. 753, 1978, p. 67. The 1973-1975 changes are from *Top Executive Compenstion 1976 Edition* The Conference Board, Report No. 706, 1976, p. 59.

Chart 30: Compensation of the Chief Executive, by Total Deposits



* Two banks with deposits over $20 billion not plotted

Chart 31: Compensation of the Five Highest Paid Executives, by Total Deposits



median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

Compensation Rank	*1982 Total Compensation* *Median*	*Middle 50 Percent Range*
Highest paid	$200,000	$137,000 to $283,000
Second	135,000	88,000 to 200,000
Third	102,000	75,000 to 148,000
Fourth	90,000	66,000 to 133,000
Fifth	80,000	60,000 to 118,000

As the lines in Chart 31 suggest, there is a positive relationship between the level of total compensation and total deposits for all five executives. The correlation coefficients for the five lines are, respectively: .81, .81, .84, .84, and .82.

The regression lines on the chart can be used to determine the average compensation of an executive at any level of deposits, either by a direct reading from the chart or by using the regression formulas below. (In these formulas, Y is total compensation stated in *thousands* of dollars, and X is deposits stated in *millions* of dollars.)

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.1222 + 0.3825 \log X$	65%
Second	$\log Y = 0.8915 + 0.4016 \log X$	66
Third	$\log Y = 0.8495 + 0.3818 \log X$	70
Fourth	$\log Y = 0.8026 + 0.3794 \log X$	71
Fifth	$\log Y = 0.7836 + 0.3706 \log X$	67

Although total compensation and total deposits are highly related, company size is not the sole determinant of compensation level. As the "coefficients of determination" (r^2) above indicate, the variation in deposits statistically explains 65 to 71 percent of the variation in total compensation of the five top-paid executives. (This coefficient is the square of the correlation coefficient.)

The ratio of the total compensation of each executive to that of the chief executive officer is shown below.

Compensation Rank	*Total Compensation as a Percentage of Chief Executive's Total Compensation* *Median*	*Middle 50 Percent Range*
Second highest	69%	60% to 78%
Third highest	54	46 to 62
Fourth highest	47	40 to 55
Fifth highest	44	36 to 49

1982 Salary

There is also a positive relationship between base salary and total deposits. The regression equations for the five top-paid executives are shown below. (Y is salary stated in *thousands* of dollars; X is deposits stated in *millions* of dollars.)

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.2456 + 0.3202 \log X$	67%
Second	$\log Y = 1.0403 + 0.3322 \log X$	67
Third	$\log Y = 0.9922 + 0.3172 \log X$	69
Fourth	$\log Y = 0.9472 + 0.3147 \log X$	74
Fifth	$\log Y = 0.9215 + 0.3101 \log X$	74

As the coefficients of determination (r^2) above indicate, the variation in total deposits statistically explains 67 to 74 percent of the variation in base salary.

The ratio of the salary of each executive to the salary of the chief executive officer is shown below:

Compensation Rank	*Salary as a Percentage of Chief Executive's Salary* *Median*	*Middle 50 Percent Range*
Second highest	70%	60% to 79%
Third highest	54	46 to 65
Fourth highest	48	42 to 56
Fifth highest	44	38 to 51

These ratios are practically the same as the total compensation ratios.

1982 Bonus Awards

Almost 70 percent (157) of the 227 banks have an "annual" executive bonus plan; that is, a plan that pays a year-end bonus based on that year's corporate performance. These plans become more common as the size of the bank increases. Only 45 percent of the banks with total deposits under $500 million have a plan, compared with 61 percent of the banks with deposits in the $500 million to $1 billion range and 86 percent of the banks with deposits of $1 billion or more (including all but two of the twenty-six banks with deposits of $5 billion or more).

These plans have become much more common among banks over the past decade; in 1972 only 23 percent of a comparable group of banks had an annual incentive plan.[2] In 1980, 55 percent had a plan.[3]

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[2] *Top Executive Compensation 1972 Edition.* (out of print). The Conference Board, Report No. 573, 1972, p. 63.

[3] *Top Executive Compensation 1982 Edition,* p. 53.

Table 7: 1982 Bonus Awards and 1981 Median Bonus

1982 Bonus Award (Percent of Salary)	*Chief Executives* Number	*Chief Executives* Percent	*Second Highest Paid* Number	*Second Highest Paid* Percent	*Third Highest Paid* Number	*Third Highest Paid* Percent	*Fourth Highest Paid* Number	*Fourth Highest Paid* Percent	*Fifth Highest Paid* Number	*Fifth Highest Paid* Percent
75% and more	10	8%	9	7%	7	5%	6	4%	3	2%
60 - 74	6	5	7	5	4	3	8	6	3	2
40 - 59	24	18	21	15	17	13	13	10	12	9
30 - 39	21	16	22	16	21	16	19	14	23	17
20 - 29	39	29	28	21	30	23	30	22	32	24
10 - 19	20	15	31	23	36	27	38	29	41	30
Less than 10%	12	9	18	13	17	13	20	15	21	16
Total	132	100%	136	100%	132	100%	134	100%	135	100%
Median Bonus	28%		24%		21%		21%		20%	
Middle 50% Range	20 - 48%		16 - 45%		15 - 35%		13 - 34%		12 - 33%	
Median Salary	$188,000		$125,000		$95,000		$86,000		$80,000	
1981 Median Bonus	**28%**		**25%**		**20%**		**20%**		**20%**	

Eighty-three percent (130) of the 157 banks with a bonus plan made an award for 1982 performance; 82 percent paid a bonus for 1981. Among the 130 plans that paid a 1982 bonus, most (108) also paid a bonus for 1981, but 22 did not. Among the 27 banks that paid no bonus for 1982, twenty paid a 1981 bonus; seven paid no bonus in either year.

The median award for 1982 performance for 669 executives is 23 percent of base salary with the middle half ranging from 15 to 36 percent of salary. As Table 7 indicates, the median award for chief executive officers (28 percent of salary), is somewhat higher than that of the other four executives (20 to 24 percent of salary). Compared with bonus awards for 1981, the 1982 medians are essentially the same.[4]

For each of the five executives, the bonus award as a percentage of salary increases with company size (Table 8).[5] The comparison with 1981 suggests that bonus awards, as a percentage of salary, are somewhat higher for 1982 performance, when company size is taken into account.[6]

In general, banks that have an annual bonus plan pay about the same in base salary to their top executives as do banks that have no bonus plan. Therefore, the total compensation of bonus recipients is higher than the total compensation (salary) of executives in companies that have no bonus plan, by roughly the percentages shown in Table 8.

Long-term Incentive Plans

Twenty-eight (12 percent) of the 227 banks have a **restricted stock plan** under which contingent grants of company stock are made, subject to restrictions and forfeitures, until earned out by continued employment

Table 8: 1982 and 1981 Bonus Awards (as Percent of Salary), by Company Size

	Total Deposits		
Executive	*$518 Million*	*$920 Million*	*$2.2 Billion*
Chief Executive			
1982 Bonus (%)	28%	32%	37%
Salary	$137,000	$163,000	$214,000
1981 Bonus (%)	26%	28%	32%
Second Highest Paid			
1982 Bonus (%)	23%	28%	35%
Salary	$90,000	$109,000	$144,000
1981 Bonus (%)	22%	24%	28%
Third Highest Paid			
1982 Bonus (%)	21%	24%	30%
Salary	$73,000	$87,000	$115,000
1981 Bonus (%)	17%	20%	26%
Fourth Highest Paid			
1982 Bonus (%)	20%	23%	29%
Salary	$65,000	$78,000	$102,000
1981 Bonus (%)	17%	20%	24%
Fifth Highest Paid			
1982 Bonus (%)	17%	19%	26%
Salary	$60,000	$72,000	$94,000
1981 Bonus (%)	17%	17%	24%

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[4] *Top Executive Compensation 1982 Edition*. p. 54.

[5] Data are derived from regression equations based on the pay of executives in 123 banks with a bonus plan that paid a bonus. The equations are shown below; the coefficient of determination is shown in parentheses.

Total Compensation

Highest paid	$\log Y = 1.2822 + 0.3543 \log X$	(68%)
Second	$\log Y = 1.0120 + 0.3814 \log X$	(69%)
Third	$\log Y = 0.9397 + 0.3694 \log X$	(71%)
Fourth	$\log Y = 0.8868 + 0.3696 \log X$	(72%)
Fifth	$\log Y = 0.8653 + 0.3608 \log X$	(71%)

Base Salary

Highest paid	$\log Y = 1.3037 + 0.3069 \log X$	(67%)
Second	$\log Y = 1.0874 + 0.3201 \log X$	(68%)
Third	$\log Y = 1.0091 + 0.3141 \log X$	(70%)
Fourth	$\log Y = 0.9745 + 0.3100 \log X$	(73%)
Fifth	$\log Y = 0.9495 + 0.3057 \log X$	(73%)

[6] *Top Executive Compensation 1982 Edition*, p. 54.

over a specified period of time. Three years ago, only 7 percent (17) of a group of 248 banks had a plan.[7]

Restricted stock plans are more common among larger banks. For example, 31 percent (8) of the 26 banks with deposits of $5 billion or more have a plan, compared with 15 percent (13) of the 86 banks with deposits between $1 billion and $5 billion, and only 6 percent (7) of 115 banks with deposits in the $300 million to $1 billion range.

Thirty-five (15 percent) of the 227 banks have an executive incentive plan based on the achievement of long-term corporate financial goals, usually called a **performance share or unit plan.**[8] In 1978, only 5 percent (13) of 227 banks had a plan.[9] These plans are most common among the largest banks. For example, seven of the thirteen banks with deposits of $10 billion or more have a plan, compared with 30 percent (17) of the 56 banks with deposits of $2 to $10 billion, and seven percent (11) of the 158 banks in the $300 million to $2 billion range.

Eleven banks made a payment during 1982 under these plans to some of the five top-paid executives. Payments to 45 executives, converted to a percentage of 1982 salary, ranged from 3 percent to 260 percent, with the median payment representing 23 percent of base salary, with the middle 50-percent range from 14 to 45 percent.

Forty-four percent (99) of the banks have a **stock option plan.**[10] Plans become more common as the size of the bank increases; for example, only 15 percent of the banks with deposits in the $300 million to $600 million range have a plan compared with 35 percent of the banks with deposits of $600 million to $1 billion, and 65 percent of the banks with deposits of $1 billion or more (including practically all the banks with deposits of $10 billion or more).

Among the 99 banks with a stock option plan, more than half (55) provide for grants of *both* ISO's and nonqualified options; 36 grant only ISO's, and 18 only nonqualified options.

Fifty of the 99 banks with a plan made a regular grant of stock options during 1982. Eighteen of the banks granted *only* ISO's, eleven *only* nonqualified options, and twenty-one granted *both* ISO's and nonqualified options. Among the 21 plans that granted both ISO's and nonqualified options, 12 (57 percent) limited nonqualified options to those executives who hit the $100,000 limit on ISO grants.

All of the 50 banks that granted options in 1982 provided information about the value of the option for one or more of their five top-paid executives. (The value of an option is the number of shares multiplied by the market price at the time of grant.) The median value of options for 242 executives is the equivalent of 60 percent of base salary, with the middle half ranging between 38 and 85 percent of 1982 base salary.

Stock-for-stock exercise (stock swaps) are provided for by 36 (40 percent) of the 91 plans that grant ISO's, and by 31 (42 percent) of the 73 plans that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by 38 (42 percent) of the 91 plans that grant ISO's. Most (21) limit SAR's to a small group of top management (essentially "insiders"); the other 17 plans grant SAR's to all ISO recipients. SAR's are provided by 31 (42 percent) of the 73 plans that grant nonqualified options. Most (19) limit SAR's to a small group of top management; the other 12 plans grant SAR's to all nonqualified option recipients.

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[7] *Top Executive Compensation 1980 Edition,* p. 55. See also, Carol Meyers Edelstein, "Long-term Incentives for Management, Part 4: Restricted Stock." *Compensation Review,* First Quarter, 1981, p. 30.

[8] For an analysis of these plans, see Laurence C. Bickford, "Long-term Incentives for Management Part 6: Performance Attainment Plans." *Compensation Review,* Third Quarter, 1981, p. 18; and Harland Fox, *Executive Incentives: Long-term Performance Share/Unit Plans.* The Conference Board, Research Bulletin No. 132, 1983.

[9] *Top Executive Compensation 1978 Edition,* p. 65.

[10] For an analysis of 189 ISO plans, see Harland Fox, *Incentive Stock Option Plans.* The Conference Board, Research Bullletin No. 148, 1983.

Chapter 7
Insurance

INFORMATION ABOUT THE 1982 compensation of their five highest paid executives was obtained from 148 insurance companies, 46 percent of approximately all life insurance and property and casualty insurance companies with premium income of $50 million or more. These 148 carriers are classified below according to total premium income from all lines during 1982.

1982 Premium Income	*Total Companies*	*Life*	*Property and Casualty*
$2 billion and over.......	13	8	5
1 - 1,999 billion..........	12	5	7
500 - 999 million........	16	11	5
300 - 499 million........	12	8	4
200 - 299 million........	29	18	11
100 - 199 million........	42	27	15
50 - 99 million.........	24	13	11
Total...............	148	90	58

The median premium income for all companies is $209 million, with the middle half ranging from $135 million to $608 million. For life insurance companies, median premium income is $209 million compared with $201 million for property and casualty companies. For the 71 stock companies, median premium income is $200 million; for the 77 mutual companies, $255 million.

Compensation Changes

On the average, total compensation for 1982 (which includes bonus awards) was 9 percent greater than in 1981 for top executives in these insurance companies. For example, in a sample of 111 chief executive officers for whom both 1981 and 1982 total compensation were available, the median increase was 9 percent, with the middle half ranging from no increase to an increase of 18 percent.

About the same proportion (46 percent) of these carriers made bonus awards for 1982 performance as did so for 1981, although the size of the awards, as a percentage of base salary, was off somewhat.

Base salaries for 1982 were up 10 percent over 1981, a sharp drop in the rate of salary increases. Salary increases for the chief executive officer position averaged about 13 percent during 1980 and 1981.[1]

		Percentage Increase in Salary	
Year	*Number of Companies*	*Median*	*Middle 50 Percent Range*
1982................	111	10%	1% to 17%
1979 - 1981..........	88	26	17 to 35
1977 - 1979..........	135	22	13 to 32
1975 - 1977..........	145	16	10 to 23
1973 - 1975..........	115	15	1 to 29

1982 Total Compensation

For each insurance company, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid ex-

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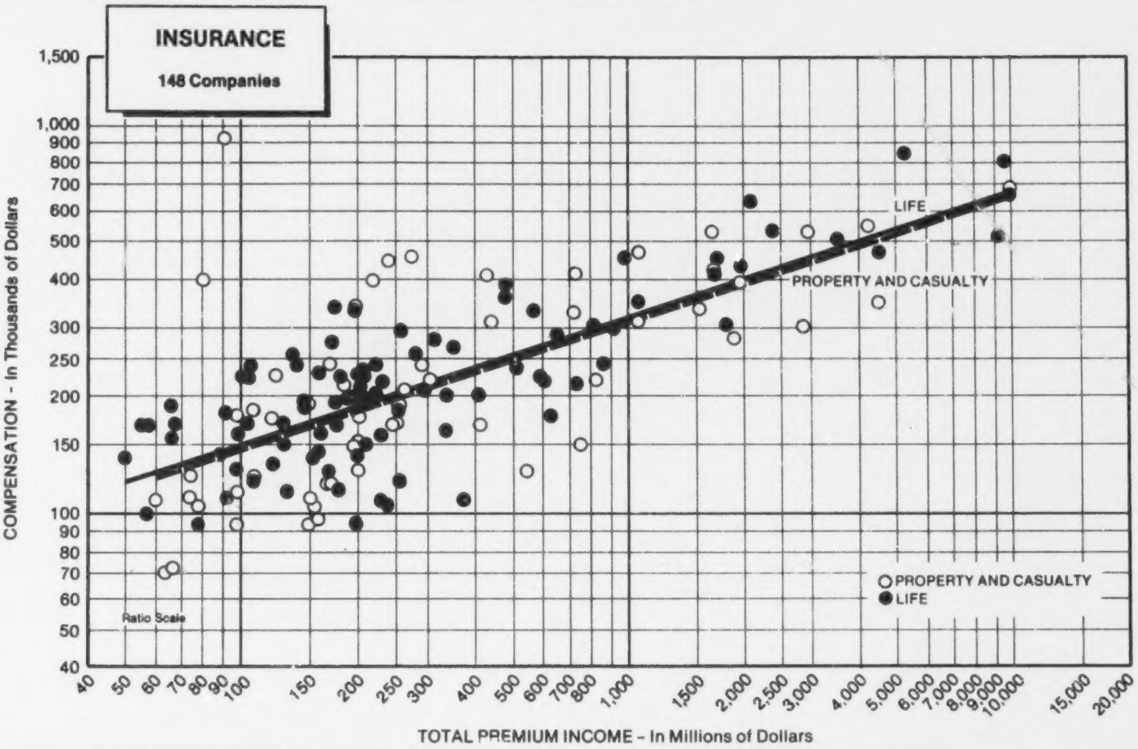
[1] The 1979-1981 changes are from *Top Executive Compensation 1982 Edition*. The Conference Board, Report No. 827, 1982, p. 57. The 1977-1979 changes are from *Top Executive Compensation 1980 Edition*. The Conference Board, Report 793, 1980, p. 61. The 1975-1977 changes are from *Top Executive Compensation 1978 Edition*. The Conference Board, Report No. 753, 1978, p. 72. The 1973-1975 changes are from *Top Executive Compenstion 1976 Edition*. The Conference Board, Report No. 706, 1976, p. 65.

Chart 32: Compensation of the Chief Executive, by Total Premium Income



ecutive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation paid to each of the chief executive officers in this particular sample of 148 insurance companies is shown in Chart 32. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

Compensation Rank	*1982 Total Compensation* *Median*	 *Middle 50 Percent Range*
Highest paid	$200,000	$143,000 to $313,000
Second	131,000	93,000 to 198,000
Third	104,000	78,000 to 150,000
Fourth	93,000	72,000 to 128,000
Fifth	85,000	66,000 to 113,000

As Charts 32, 33 and 34 indicate, there is a positive relationship between total premium income and total compensation for the chief executive officers in life insurance companies and in property and casualty companies.

The regression equations for the executives in the 58 property and casualty companies are shown below. As the coefficients of determination (r^2) indicate, the variation in total premium income statistically explains 42 to 47 percent of the variation in total compensation of the five top-paid executives.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.5341 + 0.3191 \log X$	42%
Second...........	$\log Y = 1.3543 + 0.3114 \log X$	46
Third............	$\log Y = 1.2790 + 0.3054 \log X$	47
Fourth...........	$\log Y = 1.2976 + 0.2757 \log X$	43
Fifth	$\log Y = 1.2566 + 0.2716 \log X$	45

The regression equations for the five top-paid executives in the 90 life insurance companies are shown below. The coefficients of determination (r^2) indicate that the variation in premium income statistically explains 53 to 70 percent of the variation in total compensation of the executives.[2]

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[2] The regression equations for the five executives when all companies are combined are shown below; the percent in parentheses is the coefficient of determination.

Highest paid.........	$\log Y = 1.5290 + 0.3239 \log X$	(54%)
Second.............	$\log Y = 1.3324 + 0.3278 \log X$	(59%)
Third..............	$\log Y = 1.2867 + 0.3117 \log X$	(58%)
Fourth.............	$\log Y = 1.2855 + 0.2903 \log X$	(56%)
Fifth...............	$\log Y = 1.2496 + 0.2827 \log X$	(49%)

In each case, Y is total compensation stated in *thousands* of dollars; X is total premium income stated in *millions* of dollars.

Chart 33: Compensation of the Five Highest Paid Executives, by Total Premium Income

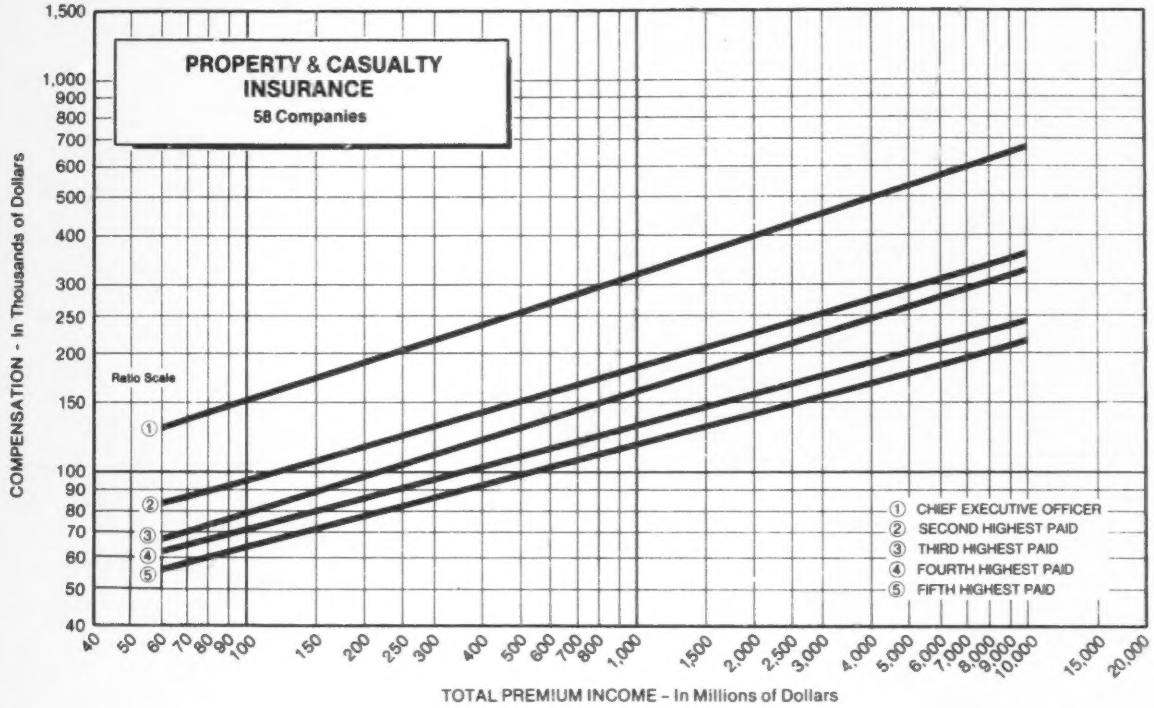
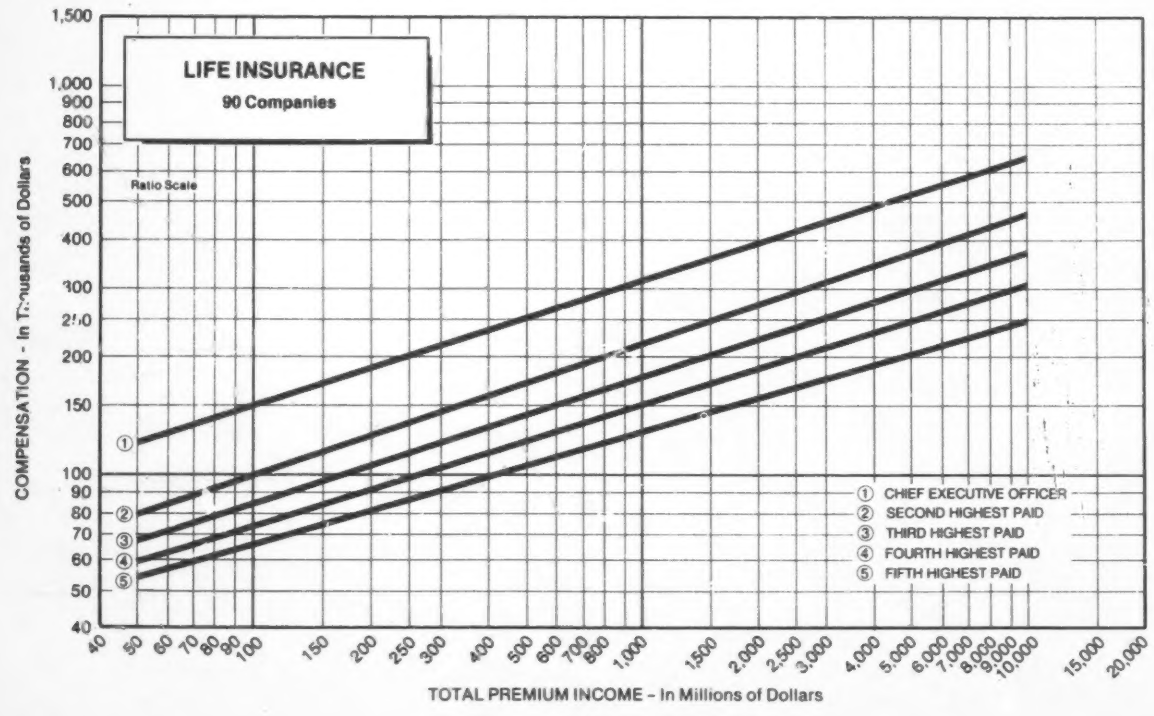


Chart 34: Compensation of the Five Highest Paid Executives, by Total Premium Income



Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.5247 + 0.3275 \log X$	66%
Second	$\log Y = 1.3153 + 0.3397 \log X$	70
Third	$\log Y = 1.2886 + 0.3170 \log X$	68
Fourth	$\log Y = 1.2742 + 0.3012 \log X$	69
Fifth	$\log Y = 1.2421 + 0.2911 \log X$	53

The ratio of the total compensation of each executive to that of the chief executive officer is shown below.

	Total Compensation as a Percentage of Chief Executive's Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	67%	57% to 75%
Third highest	56	48 to 62
Fourth highest	49	41 to 56
Fifth highest	42	38 to 50

These ratios are essentially the same in life insurance companies and property and casualty companies.

1982 Salary

There is a positive relationship between base salary and total premium income. The regression equations for executives in the 58 property and casualty companies are shown below. As the coefficients of determination (r^2) indicate, the variation in premium income statistically explains 39 to 49 percent of the variation in base salary.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.6313 + 0.2539 \log X$	39%
Second	$\log Y = 1.4569 + 0.2443 \log X$	44
Third	$\log Y = 1.3459 + 0.2548 \log X$	49
Fourth	$\log Y = 1.3507 + 0.2325 \log X$	42
Fifth	$\log Y = 1.3365 + 0.2191 \log X$	41

The regression equations for the executives in the 90 life insurance companies are shown below. The coefficients of determination indicate that the variation in premium income statistically explains 51 to 68 percent of the variation in base salary.[3]

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.5089 + 0.3138 \log X$	64%
Second	$\log Y = 1.3302 + 0.3183 \log X$	68
Third	$\log Y = 1.2972 + 0.2983 \log X$	66
Fourth	$\log Y = 1.2894 + 0.2808 \log X$	65
Fifth	$\log Y = 1.2600 + 0.2713 \log X$	51

The ratio of the salary of each executive to the salary of the chief executive officer is shown below.

	Salary as a Percentage of Chief Executive's Salary	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	68%	57% to 76%
Third highest	56	49 to 64
Fourth highest	49	42 to 57
Fifth highest	44	38 to 52

These ratios are practically the same as the total compensation ratios.

1982 Bonus Awards

Ninety-two (62 percent) of the 148 insurance companies have an annual executive bonus plan; that is, a plan that pays a year-end bonus based on that year's corporate performance. These plans have become much more common among insurance companies over the past decade; in 1972 only 24 percent of a roughly comparable group of life insurance, fire, marine and casualty companies had an annual incentive plan.[4] By 1980, 52 percent had a plan.[5]

In general, an annual bonus plan is more common as company size increases. For example, 80 percent of the carriers with premium income of $1 billion or more have a plan, compared with 61 percent of the companies with premium income of $100 million to $1 billion and 50 percent of the companies with premium income of $50 million to $100 million.

Plans are more common among property and casualty companies (71 percent) than among life companies (57 percent). About the same proportion of stock (73 percent) and mutual (70 percent) companies have a plan.

Almost three-fourths (68) of the 92 carriers with a bonus plan made an award for 1982 performance; about the same number (70) paid a bonus for 1981. Among the 68 companies that paid a 1982 bonus, most (61) also paid a 1981 bonus but a few (7) did not. Among the 24 com-

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[3] The regression equations for the five executives when all companies are combined are shown below; the percent in the parentheses is the coefficient of determination.

Highest paid	$\log Y = 1.5588 + 0.2894 \log X$	(52%)
Second	$\log Y = 1.3833 + 0.2877 \log X$	(57%)
Third	$\log Y = 1.3195 + 0.2798 \log X$	(57%)
Fourth	$\log Y = 1.3167 + 0.2605 \log X$	(54%)
Fifth	$\log Y = 1.2930 + 0.2495 \log X$	(46%)

In each case Y is salary stated in *thousands* of dollars and X is total premium income stated in *millions* of dollars.

[4] *Top Executive Compensation 1972 Edition,* (out of print). The Conference Board Report No. 573, 1972, pp. 68 and 72.

[5] *Top Executive Compensation 1980 Edition,* p. 59.

Table 9: 1982 Bonus Awards and 1981 Median Bonus

1982 Bonus Award (Percent of Salary)	Chief Executives Number	Chief Executives Percent	Second Highest Paid Number	Second Highest Paid Percent	Third Highest Paid Number	Third Highest Paid Percent	Fourth Highest Paid Number	Fourth Highest Paid Percent	Fifth Highest Paid Number	Fifth Highest Paid Percent
60% or more	11	16%	6	9%	4	6%	3	4%	1	1%
40 - 59	10	15	8	12	9	13	8	12	4	6
30 - 39	11	16	15	23	9	13	10	15	11	16
20 - 29	16	24	13	20	20	30	13	19	20	30
10 - 19	14	22	21	31	22	32	27	41	22	34
Less than 10%	5	7	3	5	4	6	6	9	9	13
Total	67	100%	66	100%	68	100%	67	100%	67	100%
Median Bonus	27%		25%		24%		21%		20%	
Middle 50% Range	17 - 43%		15 - 37%		15 - 36%		15 - 32%		12 - 29%	
Median Salary	$212,000		$134,000		$105,000		$92,000		$84,000	
1981 Median Bonus	32%		27%		25%		23%		21%	

panies that paid no bonus for 1982, nine paid a bonus for 1981; the other 15 paid no bonus in either year.

The median award for 1982 performance for 335 executives is 23 percent of base salary, with the middle half ranging from 15 to 33 percent of salary. As Table 9 indicates, the median award for chief executive officers (27 percent of salary) is somewhat higher than that of the other four executives (20 to 25 percent). Compared with bonus awards for 1981, the 1982 medians are somewhat smaller.[6]

For each of the top five executives, the bonus award tends to increase, as a percentage of salary, with company size (Table 10).[7] Again, the 1982 medians are somewhat smaller at each size level than in 1981.[8]

In general, insurance companies that have a bonus plan pay about the same in base salary to their top executives as do carriers that do not have a bonus plan. Therefore, the total compensation of bonus recipients is higher than the total compensation (salary) of executives in companies with no bonus, by roughly the percentages shown in Table 8.

Long-term Incentive Plans

Sixteen (23 percent) of the 71 stock companies have a **restricted stock plan** under which contingent grants of company stock are made, subject to restrictions and forfeitures, until earned out by continued employment over a specified period of time. This is a somewhat greater proportion of companies with a plan than in 1980; eight (9 percent) of 94 stock companies reported a plan then.[9]

Table 10: 1982 and 1981 Bonus Awards (as Percent of Salary), by Company Size

Executive	Total Premium Income $114 Million	$225 Million	$754 Million
Chief Executive			
1982 Bonus (%)	34%	34%	35%
Salary	$157,000	$189,000	$264,000
1981 Bonus (%)	31%	32%	37%
Second Highest Paid			
1982 Bonus (%)	25%	28%	32%
Salary	$103,000	$125,000	$177,000
1981 Bonus (%)	27%	30%	34%
Third Highest Paid			
1982 Bonus (%)	24%	25%	28%
Salary	$85,000	$102,000	$141,000
1981 Bonus (%)	23%	27%	30%
Fourth Highest Paid			
1982 Bonus (%)	22%	24%	26%
Salary	$77,000	$91,000	$124,000
1981 Bonus (%)	22%	25%	29%
Fifth Highest Paid			
1982 Bonus (%)	19%	21%	25%
Salary	$69,000	$82,000	$111,000
1981 Bonus (%)	22%	23%	27%

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[6] *Top Executive Compensaton 1982 Edition,* p. 60.

[7] Data are derived from regression equations based on the pay of executives in 63 companies with a bonus plan that paid a bonus for 1982. The equations are shown belown, the coefficient of determination is in parentheses.

Total Compensation

Highest paid	$\log Y = 1.7510 + 0.2773 \log X$	(43%)
Second	$\log Y = 1.4722 + 0.3109 \log X$	(61%)
Third	$\log Y = 1.4286 + 0.2883 \log X$	(56%)
Fourth	$\log Y = 1.4260 + 0.2666 \log X$	(51%)
Fifth	$\log Y = 1.3348 + 0.2804 \log X$	(55%)

Base Salary

Highest paid	$\log Y = 1.6322 + 0.2743 \log X$	(46%)
Second	$\log Y = 1.4273 + 0.2847 \log X$	(57%)
Third	$\log Y = 1.3674 + 0.2722 \log X$	(56%)
Fourth	$\log Y = 1.3612 + 0.2544 \log X$	(49%)
Fifth	$\log Y = 1.3187 + 0.2522 \log X$	(51%)

[8] *Top Executive Compensation 1982 Edition,* p. 60.

[9] *Top Executive Compensation 1980 Edition,* p. 80. See also, Carol Meyers Edelstein, "Long-term Incentives for Management, Part 4: Restricted Stock." *Compensation Review,* First Quarter, 1981, p. 30.

Eighteen (12 percent) of the 148 insurance companies have an executive incentive plan, usually called a **performance share or unit plan,** based on the achievement of long-term corporate financial goals.[10] In 1978, only 4 percent (eight) of 189 carriers had a plan.[11] Only 4 percent of the mutual companies have a plan compared with 21 percent of the stock companies. Similarly, 25 percent (seven) of the 28 companies with premium income of $1 billion or more have a plan, but only nine percent (11) of the 123 smaller carriers.

During 1982, eight companies made a payment under these plans to each of the five top-paid executives. As a percentage of 1982 salary, payments to these 40 executives ranged from 1 percent to 223 percent, with the median payment representing 20 percent of base salary and the middle 50 percent ranging from 15 to 46 percent.

Almost half (34) of the 71 stock companies have a **stock option plan,**[12] including 80 percent of the ten companies with premium income of $1 billion or more but only 36 percent of the smaller stock companies. Fourteen (41 percent) of the plans provide for grants of both incentive stock options (ISO's) and nonqualified options; 12 grant only ISO's and eight, only nonqualified options.

Fifteen of the 34 stock companies with a plan made a regular grant of stock options during 1982. Eight of the plans granted *only* ISO's; the other seven granted *both* ISO's and nonqualified options. Among the seven plans that granted *both* ISO's and nonqualified options, five limited nonqualified options to those executives who hit the $100,000 limit on ISO grants.

Fourteen of the fifteen stock companies that granted options in 1982 provided information about the value of the option for one or more of their five top-paid executives. (The value of an option is the number of shares multiplied by the market price at the time of grant.) The median value of options for 66 executives is the equivalent of 89 percent of base salary, with the middle half ranging between 33 and 136 percent of 1982 base salary.

Stock-for-stock exercise (stock swaps) are provided for by nine (35 percent) of the twenty-six plans that grant ISO's, and by seven (32 percent) of the 22 plans that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by ten (38 percent) of the 26 plans that grant ISO's. Three of these plans limit SAR's to a small group of top executives (essentially, "insiders"); the other seven plans grant SAR's to all ISO recipients. SAR's are provided by eight (36 percent) of the twenty-two plans that grant nonqualified options. Three plans limit SAR's to a small group of top management; the other five grant SAR's to all nonqualified option recipients.

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[10] For an analysis of these plans, see Laurence C. Bickford, "Long-term Incentives for Management Part 6: Performance Attainment Plans." *Compensation Review,* Third Quarter, 1981, p. 18; and Harland Fox, *Executive Incentives: Long-term Performance Share/Unit Plans.* The Conference Board, Research Bulletin No. 132, 1983.

[11] *Top Executive Compensation 1978 Edition,* p. 71.

[12] For an analysis of 189 ISO plans, see Harland Fox, *Incentive Stock Option Plans.* The Conference Board, Research Bulletin No. 148, 1983.

Chapter 8

Construction

INFORMATION ABOUT THE 1982 compensation of their five highest paid executives was obtained from 86 construction companies, 43 percent of the 200 largest.[1] These 86 construction companies are classified below according to 1982 sales volume.

1982 Sales	Number of Companies	Companies Whose Stock Is: Traded	Not Traded
$500 million and over . . .	14	12	2
200 - 499 million	13	5	8
100 - 199 million	27	7	20
50 - 99 million	19	2	17
Less than 50 million	13	2	11
Total	86	28	58

The median sales for the group is $124 million, with the middle half ranging between $73 million and $312 million.

Most (58) of the companies do not have stock traded on an organized exchange. They are relatively small companies and, except for five companies, are engaged primarily in construction, with little or no design activity. The median sales volume of the group is $105 million.

The 28 publicly held companies are much larger; their median sales volume is $413 million. Fourteen of the companies are subsidiaries of other companies. It is the parent company's stock that is traded in these companies.

Compensation Changes

On the average, total compensation for 1982 (which includes bonus awards) was 3 percent greater than in 1981 for top executives in these construction companies. For example, in a sample of 52 chief executive officers for whom both 1981 and 1982 total compensation was available, the median change was 3 percent, with the middle half ranging from a cut of 11 percent to an increase of 12 percent.

Only 65 percent of the contractors paid a bonus for 1982 performance compared with 73 percent for 1981. In addition, the size of 1982 bonus awards, as a percentage of salary, was significantly lower than 1981 awards.

Base salaries for 1982 were up 8 percent over 1981, a significant drop in the rate of salary increases. Salary increases for the chief executive officer position averaged about 13.5 percent during 1980 and 1981.[2]

Year	Number of Companies	Percentage Increase in Salary: Median	Middle 50 Percent Range
1982	52	8%	0% to 12%
1979 - 1981	34	27	15 to 43
1977 - 1979	47	19	10 to 31
1975 - 1977	54	20	6 to 35

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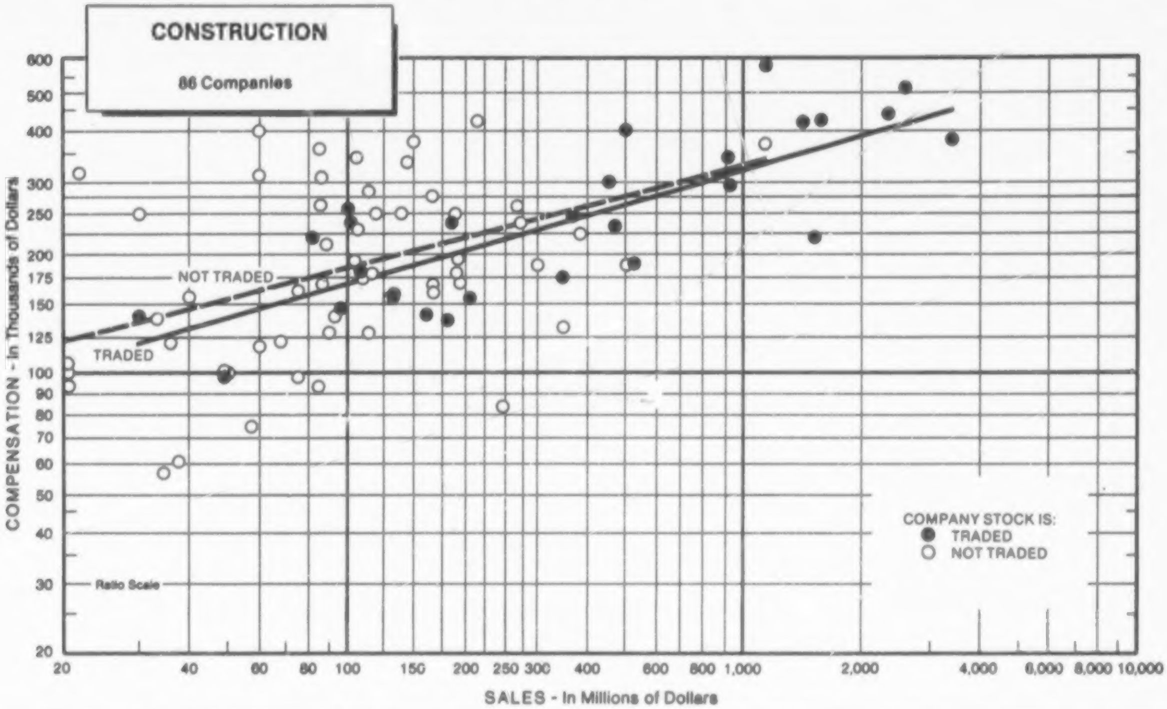
[1] "ENR 400 Largest Construction Contractors 1983." *Engineering News-Record,* April 28, 1983, p. 64.

[2] The 1979-1981 changes are from *Top Executive Compensation 1982 Edition.* The Conference Board, Report No. 827, 1982, p. 63. The 1977-1979 changes are from *Top Executive Compensation 1980 Edition.* The Conference Board, Report 793, 1980, p. 66. The 1975-1977 changes are from *Top Executive Compensation 1978 Edition.* The Conference Board, Report No. 753, 1978, p. 79.

Chart 35: Compensation of the Chief Executive, by Company Sales



1982 Total Compensation

For each construction company, compensation data were obtained for the five highest paid executives, without regard to title or function. As a rule, the highest paid executive is the chief executive officer and the second highest paid is the chief operating officer.

The 1982 *total compensation* of each of the five highest paid executives in each company is measured as the sum of 1982 salary and 1982 bonus award. The total compensation paid to each of the chief executive officers in this sample of 86 construction companies is shown in Chart 35. The median and middle 50 percent range of the pay of these chief executive officers and the other four executives are shown below.

Compensation Rank	*1982 Total Compensation* *Median*	*Middle 50 Percent Range*
Highest paid	$193,000	$141,000 to $300,000
Second	124,000	91,000 to 203,000
Third	100,000	82,000 to 156,000
Fourth	90,000	69,000 to 141,000
Fifth	83,000	63,000 to 124,000

There is a positive relationship between the level of total compensation and sales volume, as the lines in Chart 35 indicate. However, the relationship is not very strong in the 58 closely held companies. As the coefficients of determination (r^2) below indicate, the variation in sales volume explains only 15 percent of the variation in total compensation for chief executives and, at most, 35 percent for the other four executives.

Compensation Rank	*Regression Formula*	r^2
Highest paid	$\log Y = 1.7650 + 0.2536 \log X$	15%
Second	$\log Y = 1.4535 + 0.3210 \log X$	32
Third	$\log Y = 1.4884 + 0.2621 \log X$	27
Fourth	$\log Y = 1.4062 + 0.2729 \log X$	30
Fifth	$\log Y = 1.3708 + 0.2658 \log X$	35

The regression equations for executives in 28 companies whose stock is publicly held is shown below. As the coefficients of determination indicate, sales explains a much higher proportion of this variation in total compensation than for closely held contractors.[1]

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[1] The regression equations for the five executives when all companies are combined are shown below; the percent in parentheses is the coefficient of determination.

Highest paid	$\log Y = 1.7511 + 0.2562 \log X$	(32%)
Second	$\log Y = 1.4805 + 0.3011 \log X$	(51%)
Third	$\log Y = 1.5091 + 0.2469 \log X$	(45%)
Fourth	$\log Y = 1.4512 + 0.2484 \log X$	(48%)
Fifth	$\log Y = 1.3942 + 0.2545 \log X$	(55%)

In each case, Y is total compensation stated in *thousands* of dollars; and X is sales volume stated in *millions* of dollars.

Chart 36: Compensation of the Five Highest Paid Executives, by Company Sales

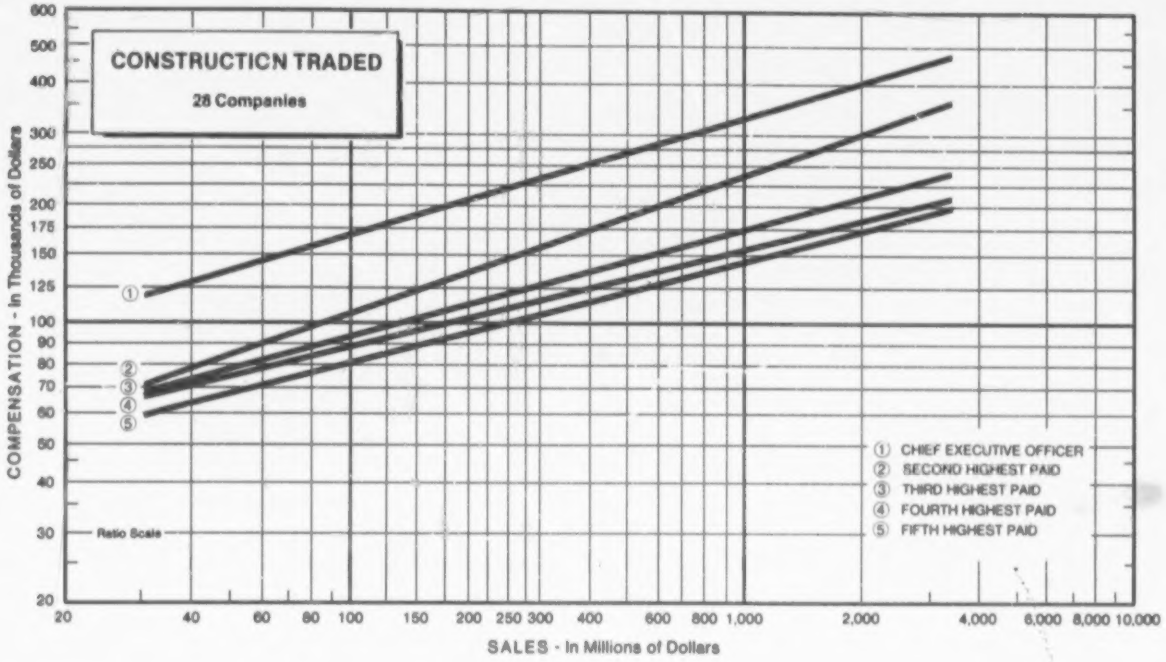
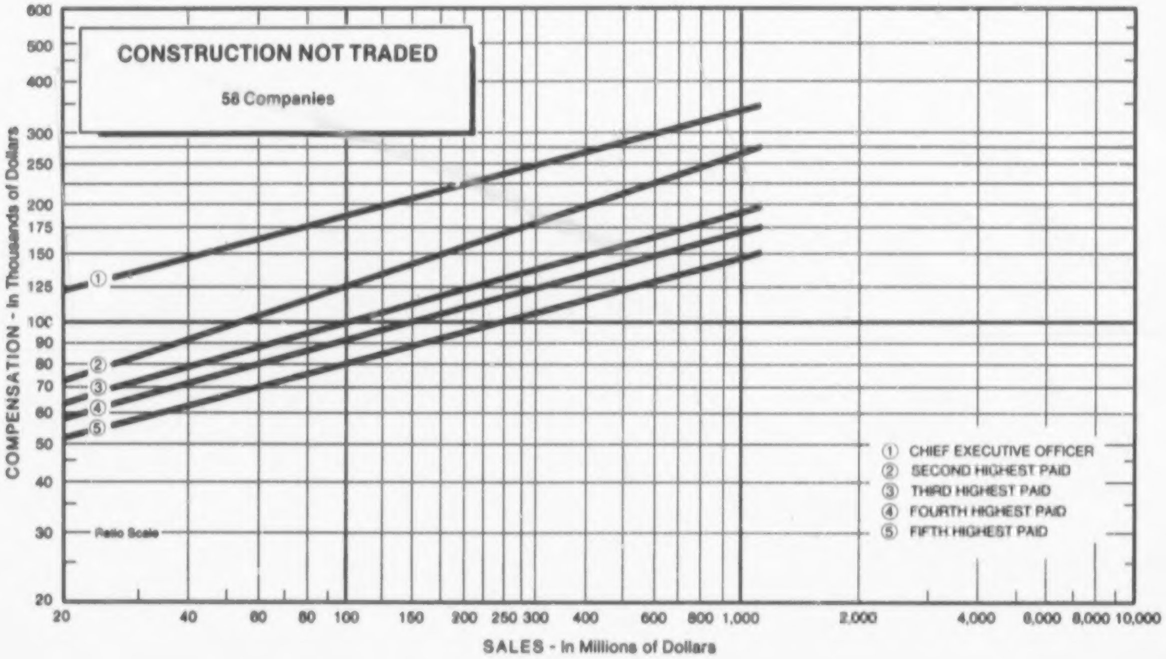


Chart 37: Compensation of the Five Highest Paid Executives, by Company Sales



Compensation Rank	Regression Formula	r^2
Highest paid	$\log Y = 1.6428 + 0.2910 \log X$	66%
Second...........	$\log Y = 1.3721 + 0.3326 \log X$	78
Third............	$\log Y = 1.4279 + 0.2705 \log X$	71
Fourth...........	$\log Y = 1.4602 + 0.2422 \log X$	73
Fifth	$\log Y = 1.4230 + 0.2433 \log X$	74

The ratio of the total compensation of each executive to the total compensation of the chief executive officer is shown below.

	Total Compensation as a Percentage of Chief Executive's Total Compensation	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	72%	57% to 86%
Third highest..........	56	43 to 70
Fourth highest.........	51	37 to 63
Fifth highest	46	32 to 57

These ratios are essentially the same among publicly held contractors and those whose stock is not traded.

1982 Salary

There is a positive relationship between base salary and sales volume. The regression equations for executives in the 28 companies whose stock is publicly held is shown below. As the coefficients of determination (r^2) indicate, variation in sales volume statistically explains 52 to 73 percent of the variation in base salary.

Compensation Rank	Regression Formula	r^2
Highest paid	$\log Y = 1.6577 + 0.2415 \log X$	52%
Second...........	$\log Y = 1.4067 + 0.2817 \log X$	73
Third............	$\log Y = 1.4196 + 0.2404 \log X$	69
Fourth...........	$\log Y = 1.4493 + 0.2142 \log X$	62
Fifth	$\log Y = 1.4242 + 0.2152 \log X$	62

The regression equations for the executives in the 58 companies whose stock is not traded are shown below. The coefficients of determination indicate that the variation in sales volume statistically explains, at most, 33 percent of the variation in salary and, for the chief executive officer, only 13 percent.[4]

Compensation Rank	Regression Formula	r^2
Highest paid	$\log Y = 1.6798 + 0.2128 \log X$	13%
Second...........	$\log Y = 1.4461 + 0.2540 \log X$	23
Third............	$\log Y = 1.3987 + 0.2453 \log X$	26
Fourth...........	$\log Y = 1.3612 + 0.2404 \log X$	28
Fifth	$\log Y = 1.3753 + 0.2195 \log X$	33

The ratio of the salary of each executive to the salary of the chief executive officer is shown below:

	Salary as a Percentage of Chief Executive's Salary	
Compensation Rank	*Median*	*Middle 50 Percent Range*
Second highest	74%	59% to 86%
Third highest..........	61	47 to 76
Fourth highest.........	53	43 to 69
Fifth highest	49	39 to 65

These ratios are practically the same as the total compensation ratios.

1982 Bonus Awards

Seventy-one (83 percent) of the 86 construction companies have an annual executive bonus plan; that is, a plan that pays a year-end bonus based on that year's corporate performance. Plans are more common among publicly held contractors (89 percent) than among the privately owned firms (79 percent). Similarly, plans are more common among companies with sales of $100 million or more (85 percent) than among smaller companies (78 percent). The high incidence of an annual bonus plan in this sector was apparent in 1978 when 82 percent reported a plan.[5]

Seventy-nine percent (56) of the 71 contractors with a bonus plan made an award for 1982 performance; however, 89 percent (63) paid a bonus for 1981. Among the 56 plans that paid a 1982 bonus, most (54) also paid a 1981 bonus. Among the fifteen companies that paid no bonus for 1982, nine paid a 1981 bonus; six paid no bonus in either year.

The median award for 1982 performance for 269 executives is 40 percent of base salary, with the middle half ranging from 24 to 74 percent of salary. As Table 11 indicates, the median award for chief executive officers (49 percent of salary) is higher than that of the other four executives (29 to 41 percent of salary). Compared with

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[4] The regression equations for the five executives when all companies are combined are shown below; the percent in the parentheses is the coefficient of determination.

Highest paid.........	$\log Y = 1.6179 + 0.2488 \log X$ (34%)
Second.............	$\log Y = 1.3992 + 0.2802 \log X$ (48%)
Third..............	$\log Y = 1.3971 + 0.2472 \log X$ (48%)
Fourth.............	$\log Y = 1.3698 + 0.2392 \log X$ (48%)
Fifth..............	$\log Y = 1.3523 + 0.2359 \log X$ (56%)

In each case Y is total compensation stated in *thousands* of dollars and X is sales volume stated in *millions of dollars*.

[5] *Top Executive Compensation 1978 Edition*, p. 77.

Table 11: 1982 Bonus Awards and 1981 Median Bonus

1982 Bonus Award (Percent of Salary)	*Chief Executives*		*Second Highest Paid*		*Third Highest Paid*		*Fourth Highest Paid*		*Fifth Highest Paid*	
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*
200% or more	5	9%	3	5%	2	4%	1	2%	—	—
100 - 199	11	19	8	14	7	13	5	9	5	10%
75 - 99	6	11	5	9	3	5	3	6	3	6
50 - 74	6	11	9	16	7	13	12	22	8	17
40 - 49	7	12	4	7	9	16	4	8	3	6
30 - 39	11	19	15	27	5	9	4	8	5	10
20 - 29	7	12	6	11	12	22	13	24	7	15
Less than 20%	4	7	6	11	10	18	11	21	17	36
Total	57	100%	56	100%	55	100%	53	100%	48	100%
Median Bonus	49%		41%		40%		33%		29%	
Middle 50% Range	30 - 100%		31 - 90%		24 - 76%		23 - 66%		18 - 58%	
Median Salary	$132,000		$96,000		$76,000		$71,000		$70,000	
1981 Median Bonus	**57%**		**45%**		**44%**		**36%**		**36%**	

bonus awards for 1981, the 1982 medians are 3 to 9 percentage points lower.[6]

Long-term Incentive Plans

Eleven (39 percent) of the 28 contractors whose stock is traded have a **restricted stock plan** under which contingent grants of company stock are made, subject to restrictions and forfeitures, until earned out by continued employment over a specified period of time. This is about the same proportion of publicly held contractors that had a plan three years ago; six (30 percent) of twenty companies reported a plan then.[7]

Four (14 percent) of the 28 publicly held companies have an executive incentive plan based on the achievement of long-term corporate financial goals, usually called a **performance share or unit plan.**[8] In 1978, three of twenty-seven publicly held companies reported a plan.[9]

Seventeen (61 percent) of the 28 publicly held companies have a **stock option plan.**[10] Eleven of these plans provide for grants of *both* incentive stock options (ISO's) and nonqualified options; four grant only ISO's, and two only nonqualified options.

Ten of the seventeen publicly held companies with a plan made a regular grant of stock options during 1982. Five of the plans granted *only* ISO's; three *only* nonqualified options; and two granted *both* ISO's and nonqualified options. The two plans that granted both ISO's and nonqualified options, did not limit nonqualified options to those executives who hit the $100,000 limit on ISO grants.

Seven of the ten publicly held companies that granted options in 1982 provided information about the value of the options for one or more of their five top-paid executives. (The value of an option is the number of shares multiplied by the market price at the time of grant.) The median value of options for 31 executives is the equivalent of 40 percent of base salary, with the middle half ranging between 24 and 79 percent of 1982 base salary.

Stock-for-stock exercise (stock swaps) are provided for by nine (60 percent) of the fifteen plans that grant ISO's, and by nine (69 percent) of the thirteen plans that grant nonqualified options.

Stock appreciation rights (SAR's) are provided by six of the fifteen plans that grant ISO's. Four limit SAR's to a small group of top executives (essentially, "insiders"); the other two grant SAR's to all ISO recipients. SAR's are provided by six of the thirteen plans that grant nonqualified options. Four limit SAR's to a small group of top management; the other two plans grant SAR's to all nonqualified option recipients.

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[6] *Top Executive Compensation 1982 Edition,* p. 66.

[7] *Top Executive Compensation 1980 Edition,* p. 65. See also, Carol Meyers Edelstein, "Long-term Incentives for Management, Part 4: Restricted Stock." *Compensation Review,* First Quarter, 1981, p. 30.

[8] For an analysis of these plans, see Laurence C. Bickford, "Long-term Incentives for Management, Part 6: Performance Attainment Plans." *Compensation Review,* Third Quarter, 1981, p. 18; and Harland Fox, *Executive Incentives: Long-term Performance Share/Unit Plans.* The Conference Board, Research Bulletin No. 132, 1983.

[9] *Top Executive Compensation 1978 Edition,* p. 77.

[10] For an analysis of 189 ISO plans, see Harland Fox, *Incentive Stock Option Plans.* The Conference Board, Research Bulletin No. 148, 1983.

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Research Bulletin

The Economic Outlook, 1984

Summary of an Outlook Meeting of
The Conference Board Economic Forum

The Conference Board

number 151

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*Unable to attend meeting of November 10, 1983

Guests at the Forum, November 10, 1983

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Merrill Lynch & Co., Inc.

CHARLES B. REEDER
Chief Economist
E.I. Du Pont de Nemours & Co., Inc.

FRANK W. SCHIFF
Vice President and Chief Economist
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Summary of The Conference Board Economic Forum

Albert T. Sommers

Albert T. Sommers
Senior Vice President and Chief Economist
The Conference Board

Meeting for its regular annual forecast of the economic outlook for the year ahead, The Conference Board Economic Forum has described 1984 as a year of broadly favorable economic development. As a group we look for steady, continuing growth—not at the record pace of recent quarters, but somewhat above a long-term norm. We see no onset of recession at any point in the year, and our view even of year-end does not suggest any ominous loss of vigor. The real growth rate should be about 5.4 percent, measured as calendar year 1984 over calendar 1983. (A little surprisingly, this outcome suggests a sustained growth rate of only 3.8 percent per annum from late 1983 to late 1984; this is a reflection of the fact that 1984 will start out at well above the average level of 1983.) We see only a very modest acceleration of inflation to about 4.8 percent from the level maintained this year.

The economy we foresee for 1984 marks a shift of gears from 1983. We see no local explosions—no virtuoso performances—in any particular sector, but instead a broadly distributed "expansion," as distinguished from the powerful but not fully coordinated "cyclical recovery" of 1983. Employment will, of course, continue to benefit from such growth, and unemployment will decline moderately (but not as rapidly as in recent months). While virtually all parts of the system participate, the eruptions of housing and inventory demand in 1983 will not recur, and the trade deficit will continue to widen. Private investment—most notably in equipment, but in some degree also in plant-building—will join in the expansion. These findings are held very nearly unanimously by the members of the Forum.

We are, nevertheless, uneasy about the policy conditions surrounding 1984. A year ago, in our forecast for 1983, fewer than half of us felt that the budget deficit visible for that year was too high, but we were unanimous in arguing that the deficits in later years clearly appeared to be too high. We come close to repeating that opinion again. It is not the 1984 budget deficit, but the deficits that lie beyond 1984 that we find disturbing. Similarly, we are uncomfortable, as we were last year, with the levels of nominal and real interest rates that prevail in late 1983. The visible trends of the system as we enter 1984 are simply too clear, too strong, and too free of problems logically traceable to the policy structure to give rise to much present concern among the members. But we appear not to have foresaken our position of last year, that the policy structure remains "lopsided"—fiscal policy too stimulative, monetary policy too restrictive—and that it will, in time, require important adjustment. At the end of 1984, according to our projection, economic recovery will still be far from complete, most particularly with respect to the unemployment rate. Further growth beyond 1984 will call for reduction in the deficit, and a considerable further reduction of real interest rates.

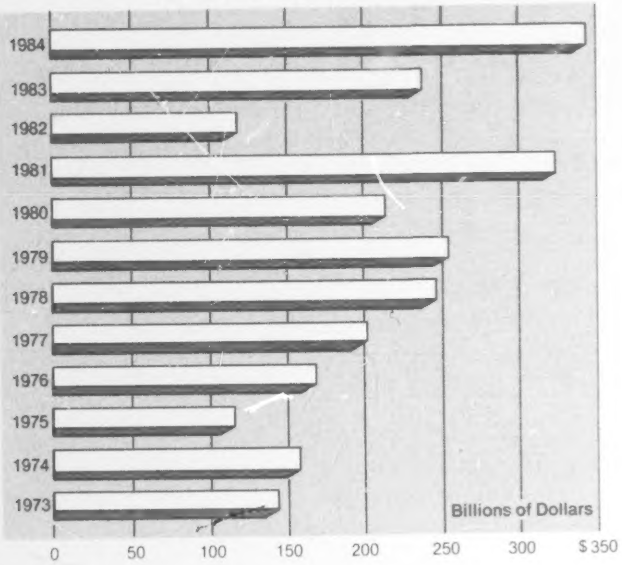
Outlook by Sectors

The participants who devoted themselves to the outlook for the general economy and its principal sectors in 1984 almost uniformly support a favorable description of the year ahead.

Our generalist, looking at all the influences at play on the national economy, describes the outlook as "almost too good to be possible." He expects a 5 percent increase in the real outlays of consumers for goods alone, and 4.3 percent for both goods and services. Capital spending in real terms will rise about 7 percent. Inventory building will continue, but at a less rapid rate; even housing starts will be up modestly. Total industrial output should be rising at a 9 percent rate in 1984 (less, of course, than the spectacular 15 percent growth of 1983), and profits should be up by over 30 percent. Total output of all goods and services in 1984, after adjustment for inflation, will be more than 5 percent above the 1983 level.

The Conference Board's Economic Forum met on November 10, 1983 for its year-end examination of business and economic conditions in the year ahead. In an effort to provide you with the highlights of this important session as promptly as possible, the Board has prepared this concise report on the Forum's findings, including the summary by Albert T. Sommers, the Board's Chief Economist and Chairman of the Forum, and selected quotations from each of the participants. Data for 1983 and 1984, appearing in the economic model and in the charts, reflect the collective judgment of the Forum, and are not necessarily identical with the views expressed by individual sector specialists.

Year-to-Year Dollar Changes in Nominal Gross National Product



Sources: U.S. Department of Commerce; The Conference Board Economic Forum (for years 1983 and 1984)

Our generalist attributes this unusual combination of broad recoveries in so many parts of the business system in part to an absence of the inflationary pressures that ordinarily arise in the presence of rapid growth. Stable or weak energy prices, further reductions in unit labor costs (themselves reflecting a decline in wage escalation in the presence of rapidly rising productivity), and the deflationary effect of a high valuation of the dollar will all conduce to a very satisfactory price performance.

Approaching the inflation potentials of 1984 from another direction, our specialist in wages, prices and costs confirms that favorable judgment of the inflation outlook. Underlying the cyclical surge of productivity gain in 1983, there appears to be a long-term reversal of the downtrend in U.S. productivity experience. The result will be an unemployment rate in 1984 (even in the presence of rapid growth) that will continue to restrain wage inflation. The resulting moderation in unit labor cost provides a basis for expectations of general price moderation throughout the year. Cyclical growth at the rate we seem to expect may imply some general acceleration of general price indexes, but far less than would be suggested by past experience with such vigorous growth. His estimate for the GNP implicit price index in 1984 is a rise of 3.5 to 4 percent; the consumer price index will rise a little more than 4 percent. All this in the presence of his own real-growth estimate of 6 percent, above the average of the group as a whole.

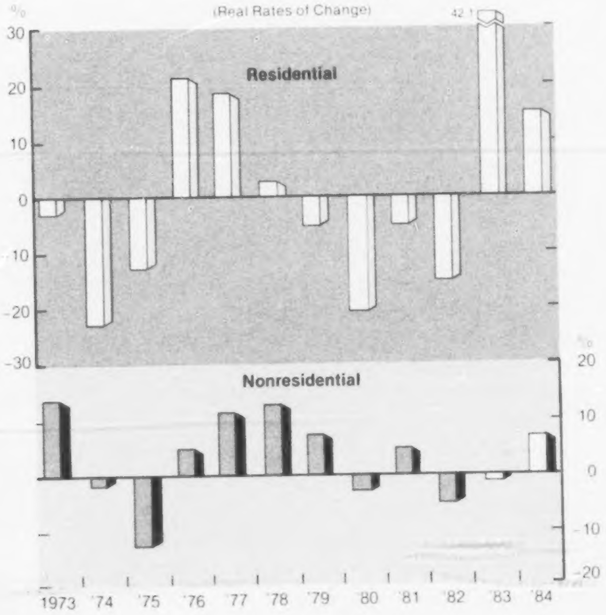
Our specialist in the consumer sector calls for continued vigorous growth in personal outlay in 1984, although not at the explosive rate reached in the Spring of 1983. The consumer debt burden is manageable; confidence is high; and expanding employment will feed the income stream. Real spending will rise by almost 4 percent—somewhat less than the rise in real disposable income, as the personal saving rate drifts up toward more normal levels. Following an exceptionally strong 1983 Christmas season, his forecast calls for moderate but sustained growth in this largest of all the components of the system.

Our spokesman for the housing sector expects the housing market to give a good account of itself in 1984, even in the absence of any considerable decline in interest rates. The housing business is now very different, both on the building side and on the financing side. Mortgage-making institutions are much more able to bid for funds in the newly deregulated markets, and will remain active mortgage lenders. And the developing national market for mortgage-backed securities has desensitized the toughest risks confronted by mortgage lenders in the past. At the same time, the higher share of homebuilding attributable to large, well-financed builders, often with their own ties to financial institutions, argues for a well-sustained housing market. He expects starts in the neighborhood of 1.7 million, about the same as in 1983—a figure that would imply as much as a $20-billion addition to the dollar value of housing as it appears in the GNP. (Some portion of this rise will reflect the continuing growth of renovations and additions.) Apartment building will constitute a somewhat higher proportion of total residential construction in 1983, partly as a reflection of the new tax-depreciation provisions.

Our specialists in the important sector of business investment in plant and equipment produce a picture for 1984 of ongoing and accelerating recovery for the sector as a whole, but with growth unevenly distributed among its many subindustries. Investment in 1984 will seek cost control in a still highly competitive environment. Concerns over market share are stimulating cost-cutting investment, but interest in new "greenfield" investment for plant and traditional industrial machinery is still not visible. Nevertheless, utilization rates are rising, and cash flow is improving dramatically. The capital goods markets, taken as a whole, will contribute substantially to the 1984 recovery. The advance is already visible in ordering rates, particularly for vehicles and materials-handling equipment. A much slower turnaround, and probably nothing more than slow growth in 1984, is the outlook for construction machinery, agricultural machinery, and machine tools; all of these subindustries are still struggling with relatively high inventories, and some of them with intense import competition. Faced with the opportunities presented by a rapidly rising cash flow, businesspeople still remain tentative, fearing both rising cost pressures and degrees of monetary restraint which would elevate the cost of capital. They are seeking to avoid the excesses that typically develop in this area, and to avoid dependence on external capital in their financing plans. The capital goods outlook is slightly qualified by these considerations; nevertheless, the machinery and equipment industries, taken as a whole, will contribute substantially to aggregate growth in 1984, whereas they were a considerable drag on the growth rate of 1983. The comments of both specialists confirm the impression that industrial construction will be generally flat in the near term, as growth in commercial-type outlays is partly offset by continuing weakness in some areas of plant construction and in office-building.

Our discussions of the demand for inventory in 1984 yield still another generally positive conclusion. By all measures, the *level* of inventory is still low, relative to the size of the present markets for goods and the prospective growth we see ahead. Inventory demand will clearly make a positive contribution to the growth of output in 1984. On the other hand, a large part of the typical cyclical reversal from liquidation to accumulation has already occurred. In the third quarter, inventories in the nonfarm sector were growing at a $20-billion annual rate; this compares with a liquidation rate of roughly $50 billion a year ago. Further growth in inventory demand is in prospect; our discussion suggests accumulation in 1984 at a more or less sustained level of between $25 billion and $30 billion. Inventory demand is thus being converted from a powerful independent source of demand to a sustaining component of the outlook.

Fixed Investment



Sources: U.S. Department of Commerce; The Conference Board Economic Forum (for years 1983 and 1984)

Our specialist in the area of government expects continuing expansion of Federal Government outlay in 1984. He doubts very much that any legislation significantly affecting either the prospective spending or the prospective revenues is likely before the election. (Legislation *after* the election may not even have an important effect on the behavior of the government sector in calendar 1985.) The spending side of the federal budget reflects a lag of approximately $5 billion behind the standard projections—a consequence of a slower gearing up of defense production and delivery than is implicit in the rate of authorizations. On the other hand, the operating outlays of the Defense Department have been at least modestly affected by the trend of increase in actual military activity. The expectations for nondefense spending are also close to conventional projections. The economies possible within the aggregate budget spending for current services are likely to be offset by moderate additions to programs that escape a presidential veto. At the time of our meeting, the prospects for legislation importantly altering spending and receipts—as envisioned, for example, in the Dole proposals—do not look bright. Our reflections on the budgetary position and the significance of the deficit are discussed below; for this sectoral purpose, aggregate federal outlays, as they appear in the national accounts, are likely to rise more or less steadily throughout the year, and rise about 11 percent above their level in calendar 1983. Similarly, expenditures of state and local governments are expected to rise by approximately 9 percent. This considerable acceleration from 1983 is already visible in recent data. The share of government in the total expenditures recorded in the gross national product is thus likely to be very little changed from its share in 1983.

Our consideration of the U.S. trade position gave weight to expectations of generally high U.S. interest rates, a continuing strong dollar, vigorous further advance in U.S. demand (far faster than the growth of our developed trading partners), and continued impairment of the import potentials of both oil-producing and non-oil producing LDC's. We expect further enhancement of the U.S. trade deficit in net exports to a level of over $40 billion for 1984 as a whole.

The Forecast Tabulated

In the traditional polling of Forum members prior to the beginning of the meeting, the 1984 outlook calls for a real growth rate of 5.4 percent—a reasonable average in that all of the responses fell in a range of 4.6 to 6 percent. (Understandably, the lowest entry for real GNP comes from our capital markets specialist, who expects relatively rapid inflation and a considerable rise in interest rates. The top of the range is represented by our specialist on costs and prices, and our monetarist, who see considerably less inflation than the Forum as a whole.)

RESULTS OF PRE-MEETING POLL*

THE FORUM CONSENSUS TABULATED:

	Actual	Estimated	Projected	Rates of Change	
	1982	1983	1984	1983/1982	1984/1983
Gross National Product (Billions of Dollars)	$3,073.0	$3,311.1	$3,654.7	+ 7.7%	+ 10.4%
Real Gross National Product (Billions of 1972 Dollars)	$1,485.4	$1,536.0	$1,618.2	+ 3.4	+ 5.4
Implicit Price Index (1972 = 100)	206.88	215.57	225.85	+ 4.2	+ 4.8
Consumer Price Index (1967 = 100)	289.1	298.4	313.1	+ 3.2	+ 4.9
Producer Price Index** (1967 = 100)	280.7	285.8	299.7	+ 1.8	+ 4.9
Unemployment Rate (% of Civilian Labor Force)	9.7%	9.6%	8.5%	—	—
Industrial Production Index (1967 = 100)	138.6	147.6	162.1	+ 6.5	+ 9.8
Corporate Profits Before Taxes, less IVA (Billions of Dollars)	$165.8	$200.9	$250.8	+ 21.2	+ 24.8

*This forecast incorporates submissions made by Forum participants on November 10, 1983, and is based on Department of Commerce data available at that time.

**Finished Goods.

The results of the poll for all of the three measures of price change show relatively narrow variation among the Forum members. There is a heavy concentration of response at the level of a 5-percent expected inflation rate for all three of the indexes. For the unemployment rate, the group anticipates an annual average of 8.5 percent, again with very little variation among the responses. The 8.5 percent rate for the year as a whole would presumably produce a rate still somewhat above 8 percent by the end of 1984. Our forecast for the industrial production index calls for an increase of almost 10 percent. This is considerably higher than the 6.5 percent annual increase of 1983, but the elevation of the 1984 forecast largely reflects the high starting level of the index at the beginning of 1984. We clearly do not expect to approach the 15 to 20 percent annual growth of industrial production of the past several quarters. For corporate profits before taxes (excluding inventory profit) we expect an increase of about 25 percent for the year as a whole; again, the level of this increase partly reflects the rapid rise of earnings within calendar 1983.

These are the results yielded by a poll taken prior to the meeting. In the course of the meeting, the Forum assembled a gross national product model by sector. The results of this collage of the individual opinions of sector specialists is generally consistent with the pre-meeting poll on the expected inflation rate. However, these estimates of real growth in the GNP model are significantly less than the expectations reported in the poll. This appears to be mainly a reflection of the substantial enlargement of the deficit in net exports proposed by our sector specialist in that area. Our limited discussion of this aspect of 1984 at the meeting clearly supports his pessimistic view (in fact, in late 1983 the ongoing deficit is apparently not much less than his expectation for calendar 1984).

The real growth in the sector account appears as 4.8 percent, as contrasted with an average of 5.4 percent in the aggregate expectations derived from the poll. In the one other direct comparison between the two sets of data that is possible—that is, with respect to corporate profits before tax, and before inventory profit—the sector account calls for an increase of over 30 percent, whereas the poll indicated about 25 percent. The difference is large, but our discussions made it quite clear that the substantial improvement in corporate profits that began in the Spring of 1983 will continue without interruption in 1984. The unemployment rate appearing in the sector account is very nearly identical with the expectations recorded in the pre-meeting poll.

The GNP forecast reveals a continuation of strength in the cyclical sectors of the economy—in personal outlays for durable goods (a 14 percent increase); in nonresidential fixed investment (about 10 percent, which will require acceleration during the year); and in a high and sustained rate of inventory accumulation. It expects continued growth in national defense outlay, at almost a 13 percent annual rate, and a reversal into growth in the dollar nondefense outlays of the Federal Government. For all the other sectors except net exports, the behavior described in the GNP model appears to be conventional performance for a business cycle that is no longer young, but is not yet beset with excesses, and that is characterized by still relatively high unemployment, and a still relatively low rate of ongoing inflation. After its rapid change in 1983, the composition of personal outlay more or less stabilizes; within the investment sectors, the pronounced decline in the growth of residential activity is offset by the recovery in plant and equipment investment, and in sustained inventory demand. On the income side of the forecast, the increases in personal income and disposable personal income are considerably greater in 1984 than in 1983, but this acceleration is partly offset by a modest rise in the personal saving rate. Within the corporate sector, the high rate of growth of profits before taxes and after taxes yields an enormous acceleration in the rate of retained earnings—a condition described by the Forum as the main contributor to the recovery of plant and equipment outlay.

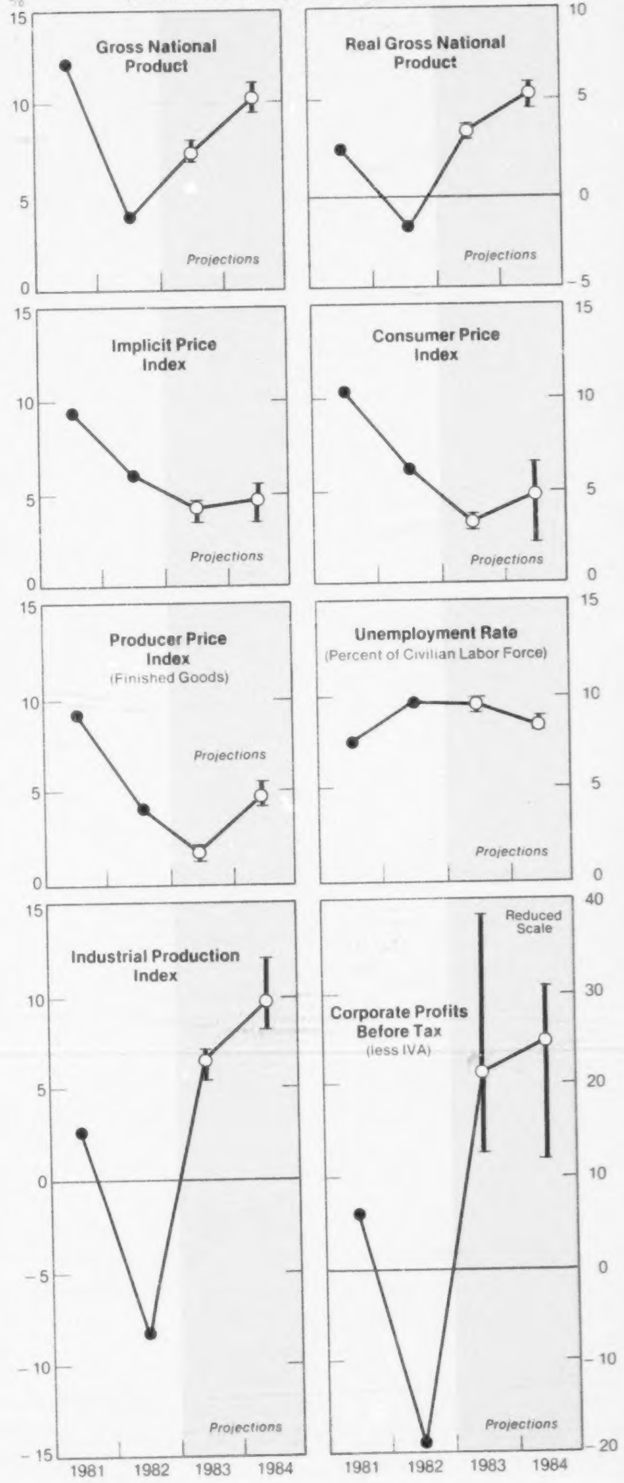
Economic Policy in 1984

The real concerns expressed by the Economic Forum involve policy, not the ordinary problems of business-cycle forecasting. Not one member of the Forum expects the expansion, so visible in the last half of 1983, to disappear at any point in 1984. The word "recession" was hardly mentioned in the course of our discussions. The growth rate will subside from the hectic, juvenile pace of an early recovery phase, but will remain substantial and broadly based throughout 1984. There was not even a clear suggestion that the growth rate will be any slower in the last half of 1984 than in the first half; a considerable majority expects growth to be well-maintained, without any big inflection point, throughout the year.

Nevertheless, the implied quarter-by-quarter growth rate in our average forecast for 1984, hints of limits to

Results of the Pre-Meeting Poll

(Annual Rates of Change, Except Where Noted)



Note: Years 1983 and 1984 are based on projections made by the Economic Forum panel; bars show highs, lows, and averages.

Sources: U.S. Department of Commerce; The Conference Baord Economic Forum.

Table 1: GNP Model by Sector, 1982-1984
(Billions of Dollars)

					Percent Changes	
		1982	*1983*	*1984*	*1983/1982*	*1984/1983*
1	GROSS NATIONAL PRODUCT	$3,073.0	$3,310.4	$3,631.7	+ 7.7%	+ 9.7%
2	Personal Consumption Expenditures	1,991.9	2,160.3	2,353.7	+ 8.5	+ 9.0
3	Durables	244.5	278.3	318.4	+13.8	+14.4
4	Nondurables	761.0	807.1	867.1	+ 6.1	+ 7.4
5	Services	986.4	1,074.9	1,168.2	+ 9.0	+ 8.7
6	Gross Private Domestic Investment	414.5	469.6	560.6	+13.3	+19.4
7	Residential	90.8	131.1	153.5	+44.4	+17.1
8	Nonresidential	348.3	343.0	376.8	- 1.5	+ 9.9
9	Change in Business Inventories	-24.5	- 4.5	30.3	....	....
10	Net Exports of Goods and Services	17.4	-12.9	-42.5	....	....
11	Government Purchases of Goods and Services	649.2	693.4	759.9	+ 6.8	+ 9.6
12	Federal	258.7	277.6	307.5	+ 7.3	+10.8
13	National Defense	179.4	203.0	228.8	+13.2	+12.7
14	Nondefense	79.3	74.6	78.8	- 5.9	+ 5.6
14	State and Local	390.5	415.9	452.3	+ 6.5	+ 8.8
16	PERSONAL INCOME	2,578.6	2,742.5	2,993.1	+ 6.4	+ 9.1
17	Personal Tax and Nontax Payments	402.1	406.1	442.3	+ 1.0	+ 8.9
18	Disposable Personal Income	2,176.5	2,336.4	2,550.8	+ 7.3	+ 9.2
19	Interest and Transfers	59.2	63.1	66.6	+ 6.6	+ 5.5
20	Personal Saving	125.4	112.9	130.6	- 10.0	+15.7
21	Saving Rate (%)	5.8%	4.8%	5.1%	....	....
22	CORPORATE PROFITS BEFORE TAX	174.2	207.2	275.2	+18.9	+32.8
23	Inventory Profit	8.4	10.6	15.0	....	....
24	Capital Consumption Adjustment	1.1	-29.7	-50.5	....	....
25	Profits from Current Production	164.7	226.3	310.7	+37.4	+37.3
26	Corporate Tax Liability	59.2	76.5	101.2	+29.2	+32.3
27	Corporate Profits After Tax	115.1	130.7	174.0	+13.6	+33.1
28	Dividend Payments	68.7	73.9	88.7	+ 7.6	+20.0
29	Retained Earnings	46.4	56.8	85.3	+22.4	+50.2
30	PHYSICAL OUTPUT (GNP in 1972 $; SAAR)	$1,485.4	$1,534.8	$1,607.8	+ 3.3	+ 4.8
31	GENERAL PRICE INDEX (1972 = 100; SA)	206.83	215.69	225.88	+ 4.3	+ 4.7
32	UNEMPLOYMENT RATE (%; SA)	9.5%	9.8%	8.6%	....	....

Note: Components may not add to totals, owing to rounding.

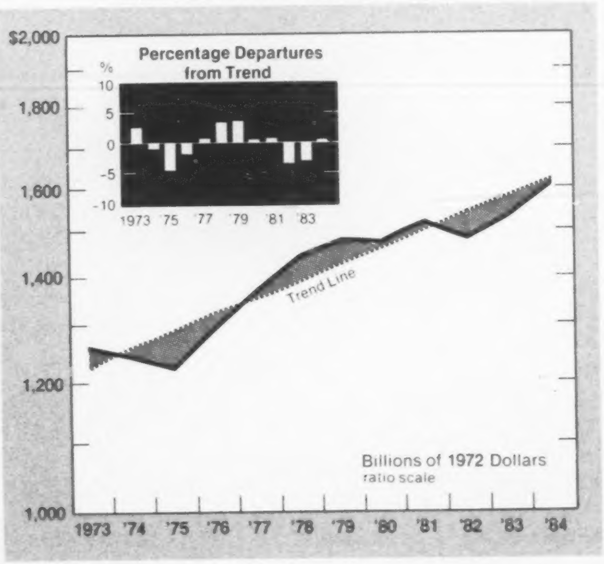
Sources: U.S. Department of Commerce; projections for 1983 and 1984 by Forum participants, with some Conference Board interpolations.

growth that were not present in 1983. The concerns of the Forum are plainly over the state of economic policy—the condition of the budget, the challenge it poses for the Federal Reserve, and the condition of credit markets and interest rates.

The positions of individual members of the Forum with respect to the economic performance of 1984 are correlated with their views on the development of policy. At one extreme, our specialist for the bond and stock markets appraises the 1983 recovery as "above average," and looks for still powerful increases in aggregate demand in the current quarter. The capital market outlook is "deteriorating," in part because the capital requirements implied by rapid growth in the private sector and a continuing very large budget deficit will produce significantly rising interest rates in the year ahead. The capital market is assuming that something will be done to avert this collision. If nothing is done, and he expects nothing to be done, a "surprise" is in store, in the shape of interest rates that will suppress activity, and qualify the outlook for stock prices. The budget deficit will not be dealt with until a "crisis." This is the stuff of which higher interest rates are made, and the rate prospects are augmented by a number of conditions created by deregulation of financial markets.

Our specialist on the monetary outlook and monetary policy takes a much more moderate view of the credit dilemma. He finds the Federal Reserve to be in an excellent position to stabilize the short-term interest rates under its immediate control. The monetary aggregates have behaved; price indexes are still exhibiting minimal inflation; and the pace of real recovery is subsiding toward normal. Moreover, the "crowding-out," implicit in the description by our capital-markets spokesman, and even the fears of future inflation so widely discussed in financial markets, are already included in interest rates and in the shape of the yield curve. Real interest rates are, in fact, still high enough to impede demand for inventory, housing, and even the credit-related portions of personal spending. Given the neutral position of the money aggregates, the Federal Reserve will be inclined to engage in traditional "leaning against the wind"—to cushion and adapt, rather than to enforce, independent changes in the money markets and the interest rates they produce. He considers the principal reason for high real interest rates in the system to be relatively restrictive Federal Reserve policy in 1983. Evidence that inflation is under reasonable control, and evidence that the cyclical energy in private business is subsiding, should gradually lead to less restrictive policy, and hopefully, in his view, considerably lower interest rates by the end of 1984.

Real Gross National Product



Note: Trend line 1973 to 1982
Sources: U.S. Department of Commerce; The Conference Board Economic Forum (for years 1983 and 1984)

The dispersion of our views on monetary outcomes and interest rate outcomes in 1984 is related to the dispersion of our views on the probable course of the budget deficit, and the significance of the deficit and its implied financing requirements for capital markets and interest rates. In general, the Forum takes a serious view of the deficit prospects described to us by our specialist on the government sector and the federal budget. He expects no real achievements in budgetary control in 1984. Indeed, he expects the deficits to stay at a level close to $200 billion for the next several years. Prospects are not bright for recent efforts to achieve major tax reduction and spending reduction. What achievement there has been on the spending side reflects in part a shortfall of defense outlay behind the authorization rate. He expects that to continue, although it will be offset by increased operating outlays. Other members point out that the defense buildup is probably bigger than it looks; that it will not be cut; and that substantial acceleration in defense production appears to lie ahead for the next several years. Only a very few of the Forum participants believe that the rapid growth being experienced as we met will importantly alter the deficit trajectory described by our specialist. Every member of the Forum subscribes to the distinction between a "cyclical" component of the deficit and a "secular," or "structural," component of the deficit. And several members argue that the structural deficit will be widening over the next few years even as growth continues: The stimulus from the deficit actually rises as the system consumes its margin of idle resources.

The Forum makes no argument for rigid adherence to a balanced federal budget. About half the members would accept an ongoing deficit of as much as 2 percent of GNP, which would now translate into about a $70 billion annual deficit. About a third of the Forum would accept a condition in which the aggregate debt outstanding maintains a constant relationship to GNP. Such a guidance rule would produce a deficit of nearly $100 billion in 1984, assuming an 8 percent rate of growth in nominal GNP. The projected deficits are, thus, more than double what a large majority of the Forum would treat as tolerable. About half of the Forum would argue for reduction of the structural deficit in 1984; virtually all of the remainder would argue for reduction in later years. Three-quarters of the members see the ongoing deficit as a cause for expecting both more inflation and higher interest rates in 1984; and a majority appear to expect further serious consequences in 1985.

The views of the Forum with respect to the budgetary and monetary dilemmas of 1984 clearly focus on the budget, and appear to treat monetary policy as having coped reasonably well with the burdens imposed by the deficit. Two-thirds of the Forum believes monetary policy has been about right in the last half of 1983 (most of the remainder consider it to have been too restrictive).

Almost half of the Forum considers that the budget deficit is the predominant reason for the high real interest rates prevailing as 1984 begins, and, somewhat surprisingly, more than half expect long-term interest rates at the end of 1984 to be higher than they are now. Half of the Forum considers that the next slowing of the U.S. expansion will be attributable to interest rates; some others believe that the next cyclical peak will simply be a reflection of ordinary cyclical experience; still others (almost a third) expect that the valuation of the U.S. dollar in international markets, and the trade deficit to which it contributes, will play a substantial role in terminating the expansion. Despite his generally favorable view of prospects for the equity market, our spokesman in that area suggests that even with continuing recovery in 1984, accompanied by generally favorable earnings performance, both the equity market and the economy itself will require a decline in interest rates to sustain performance through the year ahead.

Our international specialist adds a further dimension to these concerns. International lending practices of the past decade have built a heavy structure of debt among the non-oil producing LDC's to levels probably 20 percent greater than they can hope to support under current conditions in their trade balances. Both lower borrowing on their part, and a substantial, sustained increase in their exports to the developed economies will be required to restore order in this sector. He considers this to be achievable over the next two or three years, but the improvement depends upon vigorous growth in the West to absorb the implicit high imports. He appears to expect such growth, but the Forum as a group is less confident of the general outlook, particularly, perhaps, for Europe.

It is obvious that this meeting of the Forum is more than usually difficult to summarize, mainly because a very powerful cyclical expansion, whose opportunities are still far from consumed, coexists with a set of policy variables that are disturbing to a majority of the members, and highly cautionary to some. A majority of the Forum seems to accept a genuine threat that the prospective budget deficit will interact with the ultimate credit demands of a vigorous private economy in ways that will warrant the term "crowding-out." Our specialist in capital markets even seems to feel that the crowding-out will be accompanied by more severe rate behavior than in the past. Private deposits are now held primarily on floating rates; and the financial institutions holding the deposits will compete to keep the money, even in the face of mounting Treasury demands. The Treasury will have to buy the money from a reluctant financial sector, with more than the usual rate consequences. There is also a general opinion prevailing among the Forum members that the prospective levels of interest rates will in the end shape a "lopsided" recovery—lopsided in the sense that it will be associated with impairment to the housing market and the rate of private investment, and it will impose heavy constraints on those industries that are exposed to international competition at home and abroad.

But a large majority of the Forum does not appear to consider that these issues will reach critical dimensions within 1984. Our collective forecast carries signs of these developing problems—most particularly in the expected size of the trade deficit—but we believe that such restraints will be substantially outweighed by the continuing general strength of the system. It is the end of 1984, or 1985, or, in the views of a few members, even 1986, before the budgetary and monetary anomalies that are clearly present even now will come to outweigh the cyclical momentum that is present as we meet, and that we expect to continue so far into 1984 as to color our impression of the entire year. In a word, the Forum explicitly recognizes the quandaries resulting from substantial tax reduction; escalations of defense requirements; low probabilities that the defense surge can be offset by substantial curtailments in the rest of the budget and, hence, a seriously swollen budgetary deficit that will, in the end, plague a Federal Reserve that is struggling to maintain private growth while resisting inflation. A majority expects that a price will eventually have to be paid if the policy contradictions are not resolved; but the price and the payment apparently lie beyond 1984.

Our resident sociologist provides a suggestive closing note for the summary of the Forum's 1984 outlook meeting. In the early 1980's, a long deterioration in American attitudes toward U.S. institutions—the government, the family, even churches—has reversed into improvement. The "alienation" so characteristic of the 1970's is subsiding. He attributes the onset of recovery in "gross national spirit" in part to the Administration's own performance, and in part to the recent rapid improvement in general economic conditions. Our forecast for 1984 suggests an economic environment in which personal satisfaction with national economic conditions can continue to rise. But the improvement is still brief and fragile. Sustaining a sense of coherence in U.S. economic policy beyond 1984 would appear to be important for more than just economic reasons.

Business Outlook: 1984 Should be an Unusually Good Year

Charles B. Reeder

A brief review of the outlook for various aspects of the U.S. economy in 1984 leads to the inescapable conclusion that the year ahead should be an excellent one—for consumers, for business, and also for the government.

- Total employment should rise by over 3 million to a new all-time peak, and unemployment should decline another million during 1984.
- Total retail sales should rise another 5 percent in real terms, with new car sales up 15 percent.
- Industrial production should continue rising all year and register an annual gain of 8 to 10 percent.
- Corporate profits should increase by more than 30 percent.
- The rate of inflation should remain low in 1984, with the CPI rising 4 to 5 percent over 1983.
- Interest rates should decline one to three percentage points from present levels.
- The federal deficit should shrink by at least $30 billion from 1983's record of $195 billion.

Such a buoyant outlook appears almost too good to be possible—especially the prospects for low inflation and declining interest rates. How can this take place if the economy grows strongly for a second consecutive year?

Clearly there has to be something different about this recovery from other recoveries if all of these good things are to happen. That "something different" in the inflation picture involves: stable to weak energy prices as a result of a continuing excess worldwide supply of oil in relation to demand; sharply lower unit labor costs as a consequence of the unprecedented decline in the rate of wage escalation, combined with surging productivity growth; the deflationary effect of an overvalued dollar; and sharply lower rates of increase in housing costs.

These factors should more than offset any upward pressure on the price level from the accelerated rise in the money supply between mid-1982 and mid-1983, and also the rebound in some industrial commodity prices over the past several months. The latter has been a normal response in the early stages of recovery where price had been driven to unrealistically low levels in the recession.

The initial effects of the faster rise in the money supply last year were lower interest rates and the beginning of real economic recovery, not accelerating inflation. The rate of growth in the money supply is currently slowing, so that even this potential source of higher inflation may no longer exist.

Charles B. Reeder
Chief Economist
E.I. Du Pont de Nemours & Co., Inc.

The "something different" affecting interest rates comprises their already very high absolute level; the prospect of reduced public and some private credit demands in 1984; and the indirect pressures imposed on U.S. monetary policy by the international debt situation.

Interest rates have fallen significantly from their peaks in 1981, but they are still extraordinarily high in relation to actual inflation, and to inflation prospects. The current spread between the prime rate and the inflation rate is 8 percentage points, more than triple the historic spread. Thus, even though rates are down from recent peaks, there is ample room for them to decline further.

The U.S. Treasury has substantially reduced its estimate of the size of the federal deficit for 1984, and further reductions are likely as the recovery becomes stronger. Revenues are rising rapidly, and lower inflation is having a dampening effect on outlays. To the extent that the federal deficit has contributed to the current level of interest rates, a smaller deficit next year should lead to lower rates.

In the private sector, consumer and mortgage debt probably will rise in 1984, but business borrowing should be lower. Corporate internal cash flow is soaring and should outstrip the prospective rise in capital expenditures next year. Moreover, corporations have increasingly been raising funds with equity issues rather than debt instruments.

The debt-servicing problems of Third World nations will persist for many years. The best way to help these countries is for the present recovery in the industrialized world to continue and for interest rates to decline. It is reasonable to assume that the Fed will not tighten credit and raise interest rates in 1984. Any tightening of credit by the Federal Reserve would restrict recovery in the industrial countries, intensifying the already serious problems of debt-burdened developing nations, not to mention the problems of banks with loans to these countries.

Thus, all of the elements are present to make 1984 an unusually good year. Low inflation and declining interest rates may not be typical in the second year of recovery from a recession, but the 1981-1982 recession was not typical, and government fiscal and monetary policies preceding the recovery were not typical.

Wages, Prices, and Productivity

Barry Bosworth

Barry Bosworth
Senior Fellow
The Brookings Institution

The rapid decline in the unemployment rate from 10.7 percent in December, 1982, to 8.7 percent in October, 1983, is one of the most striking features of the current economic recovery. It stands in sharp contrast to earlier discussions of a modest economic expansion, and it implies cyclical job gains larger than in prior recoveries. In contrast, the latest data on output per manhour indicate an unusually strong cyclical gain in labor productivity. That implies that workers are being rehired at a slow pace relative to the gains in output. The explanation for this apparent conflict lies with a large discrepancy in the estimates of employment gains from two surveys. The survey of households, which produces the estimate of the unemployment rate, reported a gain in nonfarm wage and salary employment of 2.4 million between May and September. The survey of business establishments, on the other hand, estimated the increase at only 1.3 million.

That discrepancy did narrow during the month of October, when the establishment survey showed a gain of 300,000 jobs compared to a decline of 150,000 in the household survey. However, because the household survey also reported a 550,000 decline in the number of individuals looking for work, there continues to be substantial uncertainty about the meaning of the employment numbers.

Normally, the establishment estimate of employment changes is believed to be the more reliable number; but, because differences in the employment count between the two surveys are highly correlated with variations in the labor force, there is no particular pattern of error in the estimate of the unemployment rates. The 1983 employment discrepancy, however, is not completely offset by larger-than-normal increases in the labor force, and, together with the large October decline in the labor force, it suggests that the current unemployment rate estimate is abnormally low by about 0.5 percentage points. This factor, together with moderation of the overall expansion in the second year of recovery, leads me to expect very modest further declines in unemployment during 1984.

If the establishment estimate of employment is judged to be the more reasonable, the improvement in labor productivity is more than would be expected from purely cyclical factors. That is encouraging in suggesting at least a partial turnaround in the deterioration of productivity growth that occurred during the 1970's. That improvement seems most evident in the manufacturing sector.

On the inflation side, a continuation of unemployment above 8 percent throughout 1984 argues against any significant acceleration of wage inflation. Hourly earnings have been rising at about 4 to 5 percent annually, and total labor compensation at about 5 to 5.5 percent. Despite all the emphasis on concessionary labor negotiations, union increases continue to exceed those of nonunion workers by about 1 percentage point, but nearly all that difference is accounted for by the greater importance of fringe benefits (pensions and medical insurance) in the union agreements.

Overall, inflation should accelerate some simply because past highly favorable factors, such as falling energy and agricultural prices and a rising U.S. dollar exchange rate, could not continue indefinitely. Still, the moderate increases in unit labor costs provide a solid basis for a very good outlook for price inflation. The United States is emerging from the 1980-1982 recession with an underlying inflation rate about 2 percentage points below that of the 1975 recession, and unemployment will remain substantially higher than at comparable stages of the 1976-1979 recovery.

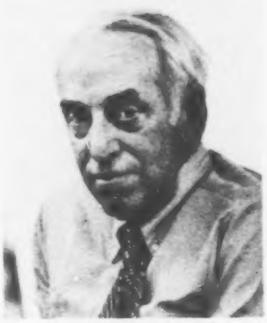
The Monetary Outlook

James Tobin

"Steady as you go" seems the likely course of monetary policy for the next several months. The Federal Reserve is in an excellent position to hold quite stable the short-term nominal interest rates under its immediate control. The monetary aggregates are well inside their targets. Prices are still well-behaved. The pace of real recovery is moderating. Moderate tightening over the last two or three quarters of 1984 seems likely on the basis of consensus economic forecasts, but Fed policy will be sensitive to price, employment, output, and exchange-rate developments.

Fed policies regarding short-term interest rates will be the main determinants of long-term rates. Expectations and fears of future inflation and/or "crowding-out" are already in the term premiums, and there is little on the horizon to change them.

A case for a more expansionary policy would be based on the perception that continuation of the recovery now depends on domestic investment. The initial brisk recovery was fueled by the shift from inventory liquidation to re-stocking, by housing construction, and by personal consumption. The latter two sources benefited from the backlog of demands for housing and durable goods, partially released by the interest-rate reductions a year ago and by improvements in actual and expected consumer wealth and disposable incomes. Real interest rates are still high, an obstacle to further improvement in these categories of demand. Fixed nonresidential investment is just beginning to improve, and it remains to be seen whether—given the cost of capital and the remaining excess capacity—it can now be the active agent of expansion. The trade balance deficit is a drag on the recovery, one that will get worse unless the dollar depreciates. For this reason, the Fed would certainly prefer to reduce rather than increase the differential of our interest rates above foreign rates.



James Tobin
Sterling Professor of Economics
Yale University

A case for a less expansionary policy would be based on the fear of a revival of inflationary pressures—a fear that gains weight the longer the recovery continues. Caution will be the greater as the inevitable increases in cyclically sensitive commodity prices enter monthly statistics of "inflation."

"Leaning against the wind" is a time-honored central bank strategy, quite open to the Fed when its M-targets are not binding in either direction. In addition, interest-rate increases are a way to press Congress and the Administration to correct the structural budget deficit. It is still desirable to alter the future mix of monetary and fiscal policy in the United States—a change requiring the cooperation of both sets of policymakers. But the prospects look dim until after November.

Capital Markets

Daniel S. Ahearn

The capital market outlook is deteriorating, following a year of substantial rise in stock and bond markets. The outlook has deteriorated because the markets' earlier record gains discounted most of the "good news" that still lies ahead, and also because the "good news" (on real economic growth, interest rates, inflation, monetary and fiscal policies, the impact of international debt problems on the world's financial institutions) will be less "good" in the year ahead than it was in the past year.

Optimistic views of the capital market outlook typically rely on an expectation of a protracted period of subdued economic activity, secular disinflation, and a long period of much lower interest rates to produce another major rise in the stock and bond markets.

Daniel S. Ahearn
Partner
Thorndike, Doran, Paine
and Lewis

The unfolding evidence is not supporting this outlook. The economic recovery, which was initially expected to be weak, was first transformed into an "average" recovery and is becoming "above average." While many still count on a slow economy in the fourth quarter of 1983, reacceleration in September and October suggests another bigger-than-expected real GNP quarter, that could rival the third quarter's 7.9 percent rise (which itself may well be revised upward). Indeed, the big improvement in consumer buying attitudes and the earlier-than-expected strength in the capital equipment market, hint that the economy may remain stronger than expected throughout 1984. This possibility would strengthen if prices rise to the point where consumers and businesses feel impelled to buy ahead.

Concern about inflation is not significant currently, but 1984 may test those who foresee secular disinflation or, at worst, years of subdued 4 to 5 percent inflation. Inflation bottomed in the first quarter of 1983 and, though still at low levels, has been trending up at a 5 percent rate since then; the uptrend should continue in 1984. The lagged effect of this Summer's drought will put upward pressure on food prices. Higher levels of economic activity should strengthen commodity prices and make it easier for business to secure price increases and for labor to defend its wages more effectively. Productivity gains are normally slow in the second year of recovery. A very strong dollar has been a potent anti-inflationary force for two years, but the dollar is now vulnerable. Thus, dollar weakness in 1984 may well add to inflation pressures.

None of this means that a return to double-digit inflation is imminent, but an uptrend in inflation will be a disturbing change from the 1981-1983 downtrend. It is likely to cause uncertainty as to where inflation will stop. Once such questioning begins, the ongoing massive federal budget deficits and the historically high backlog of money and credit growth will be discouraging omens for the future inflation prospect.

That interest rates reflect much more than inflation was illustrated anew in 1983. Interest rates declined less than inflation did in the first half of 1983—and then rose significantly. The strengthening economy disappointed hopes of still further easing in Federal Reserve monetary policy. The surge in the economy coupled with acceleration in consumer and mortgage borrowing reminded market participants that, in time, resurgent private borrowing was likely to compete vigorously with heavy Treasury financing needs. The first signs of increase in business financing requirements are becoming visible, and should become more so in 1984 as inventories are rebuilt and capital expenditure needs rise. Meanwhile, both the President and the Congress appear to be counting on economic recovery, not courageous political actions, to reduce the record budget deficits. Unfortunately the structural nature of those deficits means that cyclical recovery will help only briefly and not enough. Thus, it is only a matter of time until significantly higher interest rates will be needed to allocate the available supply of funds among borrowers.

Some in the capital markets count on the Federal Reserve to hold short-term rates down in an election year. This would require adding excessively to the already high year-to-year increment of bank reserve funds and seems unlikely. While there is much dispute about how much of the massive growth in the monetary aggregates is "real money," Federal Reserve officials are aware that the economy has responded as though much of the monetary growth is "real," and they remember the inflationary and interest-rate consequences of past episodes of excessive monetary stimulation. This time, the outlook for years of very large structural budget deficits increases the risks.

The deregulation of interest rates is adding upward pressure on interest rates. In particular, the creation of hundreds of billions of new floating-rate money-market deposit accounts means that the deposit bases of thrifts and commercial banks will no longer be available to be competed away by the U.S. Treasury, holding down Treasury bill rates in the process. Instead, the banks will raise deposit rates to retain their funds, and upward interest rate volatility will increase.

Thus, interest rates are projected to rise 100 to 200 basis points (or more) in an irregular uptrend, interrupted by recurrent sinking spells, until they hamper the recovery late in 1984 or in 1985. Equities will be affected by this heightened interest-rate competition, and are unlikely to provide more than a small fraction of the 60 percent plus return they provided in the past year.

The Government Sector

Frank W. Schiff

Frank W. Schiff
Vice President and
Chief Economist
Committee for Economic
Development

When Congress passed its First Budget Resolution last June, the belief was widespread that failure to carry out the Resolution's instructions to reduce the deficit to about $130 billion by fiscal year 1986 would almost immediately have highly adverse effects on financial markets and be likely to abort the recovery. It is now November and the new fiscal year has started. Yet Congress has thus far not been able to agree on reconciliation legislation that would come close to meeting the overall deficit reduction required under the Resolution. While its actions on the spending side have been closely in line with the Resolution's targets, no way has yet been

Table 2: Major Components of Budget Outlays as a Percent of Gross National Product

							Estimated			
Fiscal Years	*1972*	*1978*	*1979*	*1980*	*1981*	*1982*	*1983*	*1984*	*1985*	*1988*
National Defense	6.79%	5.03%	4.99%	5.28%	5.56%	6.18%	6.67%	6.98%	7.44%	7.82%
Net Interest	1.37	1.69	1.81	2.04	2.39	2.79	2.74	2.91	2.97	2.76
Social Security and Railroad Retirement	3.67	4.59	4.53	4.73	5.00	5.26	5.44	5.19	5.06	4.84
Medicare[1]	0.66	1.09	1.12	1.25	1.36	1.54	1.66	1.70	1.76	1.87
All Other Budget Outlays										
Payments for Individuals	3.59	4.07	3.89	4.44	4.55	4.57	4.86	4.20	3.96	3.41
Grants-in-Aid[2]	1.77	2.48	2.29	2.22	1.91	1.56	1.54	1.47	1.34	1.05
Other	2.60	2.48	2.20	2.45	2.11	2.11	2.25	1.56	1.39	1.09
Total, All Other	7.96	9.03	8.38	9.11	8.57	8.24	8.64	7.23	6.68	5.55
Total Budget	20.45	21.43	20.83	22.40	22.88	24.02	25.17	24.02	23.92	22.83
Off-Budget	—	0.50	0.53	0.55	0.73	0.57	0.52	0.41	0.27	0.18
Total Budget and Off-Budget	20.45	21.93	21.36	22.95	22.61	24.59	25.69	24.43	24.19	23.01

[1] Includes premiums and collections.

[2] Includes grants-in-aids that are payments for individuals.

Sources: Office of Management and Budget (*Budget of U.S. Government, Fiscal Year 1984*, and April, 1983 update for basic data); Committee for Economic Development, *Strengthening the Federal Budget Process: A Requirement for Effective Fiscal Control*, 1983, p. 11.

found to meet the requirement for increasing tax revenues by $73 billion over the next three years.

The most likely current prospect is that no major additional action will be taken and that the deficit, which came to $195 billion in fiscal 1983, will continue to stay in the $190-$200 billion range through fiscal 1986. Moreover, the structural component of the deficit will be rising progressively as a share of the total deficit over these years, producing the perverse result that fiscal stimulus will be increasing as the economy moves toward higher levels of capacity utilization and employment.

The lack of action on the budget deficit to date has been strongly influenced by the strength of the economic recovery, and the fact that most current forecasts envisage a continuation of relatively vigorous economic growth for another year or two while the size of the deficit remains unchanged. But the realization is now growing that although large prospective deficits may not produce imminent disaster, they are likely to contribute to a very lopsided recovery and less capability for real growth over the longer run. By placing upward pressures on interest rates (and, indirectly, on the dollar exchange rate), they will have increasingly adverse effects on the interest-sensitive sectors of the economy and on industries exposed to international competition.

Partly in response to such concerns, the Senate Finance Committee, under the leadership of Senator Dole, is currently attempting to devise a legislative package that would reduce the cumulative deficit for fiscal years 1984 through 1986 by $150 billion, with half of the reduction stemming from expenditure cuts and half from revenue increases. While the Committee's approach would apparently involve added savings from discretionary nondefense programs, it recognizes that the potential for such savings is limited (defense, entitlements, and net interest, currently constitute about 85 percent of total budget outlays); and assumes a major reduction in the deficit is likely to require budget savings from non-means-tested entitlement programs, as well as tax increases. A key feature of the proposed approach would be the coupling of a reduction in Social Security cost-of-living adjustments by 2 to 3 percentage points with an equivalent reduction in tax indexing.

Although the Finance Committee's effort has attained greater momentum than most observers had expected, chances do not appear bright for adoption of a major deficit-reducing package in the immediate future, particularly since the President has declared his firm opposition to the reported tax-increase proposals. Since agreement on a meaningful deficit-reduction package may become even more difficult in 1984, a number of proposals have been made to entrust the design of such a package to a public-private commission that would make its report after the election.

Deferring action on the deficit until early 1985, however, would entail major risks. Even if agreement could then be reached, there would be a considerable time lag until the deficit-reduction measures could take effect. If a weakening of the expansion were in prospect by that time, the chances for reaching an agreement might also be poor. In addition, delay in acting on the deficit will have continuous adverse consequences, including significant increases in the burden of interest payments on the federal debt. Such payments currently amount to over $100 billion a year.

Against this background, renewed efforts for meaningful action on the deficit may well emerge in the early part of 1984. The prospects are not promising that these will result in really significant action, unless heightened public awareness of the risks of inaction or an actual upsurge in interest rates produce strong political pressures on both the President and the congressional leadership for an agreement.

The International Outlook

George M. von Furstenberg

During the period 1979 to 1981, non-oil developing countries (but including Mexico) managed to raise both their imports and their external debt by around 40 percent in real terms. It is amazing that it took international lenders and borrowers three years to recognize that such profligacy could not last.

Nevertheless, in international economics, punishment tends to fit the crime eventually, and little is forgiven even developing countries. Hence, for them there may be three lean years, 1983 to 1985, following the three fat years, 1979 to 1981, that ended in confusion in 1982. The total stock of external debt (including debt to non-bank holders) of non-oil developing countries is now perhaps 15 percent—or about $100 billion—higher than what it should be. Two more years in which this debt grows 5 or 6 percent on average, while the dollar value of exports increases 12 to 14 percent per annum, would be about sufficient to bring external debt back into balance with these countries' growing export trade. In 1984 and 1985, non-oil developing countries as a group will, therefore, have to pay about half of the nominal interest on their debt through austerity if the present crisis is to be substantially resolved.

Particularly in Eastern Europe, there are countries whose external debt should not grow—even in nominal terms—for some time. In a few others, particularly in Asia, such debt, like their output, may increase faster than the average as long as it grows 6 to 9 percent less than the dollar value of their exports. Austerity can work in the developing world as a whole because an end to it is now in sight.

The United States and other industrial countries have engaged in monetary and fiscal stimulation to a degree that easily overpowers the effects of tight import restraints with which developing countries must live for a while longer. The U.S. deficit alone will be $80 to $100 billion larger in the next two years combined than one would normally expect in expansion. Hence there is no global macroeconomic inconsistency in advising non-oil developing countries at this time to export more and borrow less: The world recovery will proceed anyway.

George M. von Furstenberg
Rudy Professor of Economics
Indiana University

Difficulties will grow in other countries as the configuration of problems shifts. By 1986, developing countries will have benefited greatly from cyclical improvements in their terms of trade. They may again be increasing their net external debt by $100 billion or more annually; double-digit inflation may well have returned to the United States; and the memory of an overvalued dollar will be fading fast.

The practice of political economy does not aim so much at solving problems as at transforming them into different problems, hoping that the entire problem chain remains manageable. We should not be surprised, therefore, if the roller coaster will plunge past the recent deflation in traded goods prices to deceptively good times, before stalling on stagflation at the end of the present turn.

The Social Situation

Amitai Etzioni

Parallel to recent improvements in the economy, alienation has subsided. For instance, a sociological measurement called the "gross national spirit (GNS)" recently stood at 1246, 15 percent higher than in June, 1981, reflecting an improvement in the sense of the way things are going for the country. (In 1982, Americans were more satisfied with their personal fate than with the country's; since then, personal satisfaction remained about the same, but satisfaction with the national condition has improved.) This attitudinal measure also reflects an expectation that things will get even better, and a sharp decline in the proportion expecting the economy to worsen.

There is also increased satisfaction with the government; most recently, with the President's performance following the intervention in Grenada. Other measures of retreat from institutions, from the family to churches, have bottomed out and have started to climb back.

If one assumes that objective economic improvements have a beneficial psychic effect, which in turn provides the economy with a secondary boost, we must expect, over the next year:

(1) A decline in satisfaction, because the economy will not continue to grow and unemployment to subside at the same pace as in the last year;

(2) Even if these improvements continued, they would no longer have the same positive effect, as good economic news is quickly discounted and attention turns elsewhere;

(3) Various political developments are likely to dampen the sense of optimism about the government. Two examples are a possible Soviet walk-out from the arms control talks, and growing uncertainty over who the next President will be. Assuming Mr. Reagan chooses to run again, once a Democrat is nominated the small distance between the GOP and the Democratic candidate in public opinion polls will add a measure of uncertainty about future policies; and

Amitai Etzioni
University Professor
George Washington University

(4) The inability to deal with the deficit will come more into focus. The effect of a new, tight monetary policy by the Fed after the election in an unfavorable economic climate has not yet surfaced in the public mind—and probably will not until later in 1984. However, it seems to affect expectations concerning "long run" interest rates as much (or more) than inflationary expectations.

(5) The wave of public satisfaction will crest later than that of investors. The GNS of people whose income is $30,000 or more rose only 5.4 percent in 1983 (compared to 1982), while that of other people rose 15 percent in the same period.

Business Investment

Lawrence Chimerine

Real GNP will grow by an average rate of about 4 percent between now and the end of 1984. A substantial shift in the sources of growth is under way, with the business sector becoming a larger contributor and the household sector contributing less. The reduced rate of growth expected for 1984, as well as the shift in composition, is typical for the second year of economic recoveries, although next year's GNP increase will probably be somewhat below the average of previous recoveries because of relatively high real interest rates and the overvalued U.S. dollar.

While a sharp slowing of the recovery is virtually certain, a complete stalling in the near term is still unlikely: (1) It is becoming increasingly likely that the period of rising interest rates has run its course, and rates will stay roughly at current levels, or decline slightly, later this year and into 1984; (2) The underlying fundamentals that are producing the recovery—including the sharp decline in the inflation rate already experienced, prospects for continued moderate inflation, improvement in the financial condition of most U.S. households, very stimulative fiscal policy, and interest rates that remain below those which prevailed in 1981 and early 1982—remain in place.

Lawrence Chimerine
Chairman and Chief Economist
Chase Econometrics

Initial GNP data for the third quarter show that equipment investment is continuing to make strong advances from its 1983:IQ low point. Total nonresidential spending increased at a 14.7 percent annual rate in the third quarter, following a gain of 8 percent in the previous quarter. Overall equipment spending has been remarkably robust for this stage of the recovery. The preliminary estimates indicate a much more solid recovery in equipment spending than that accompanying the 1974-1975 recession. If equipment investment continues to grow this quarter as it has recently, the previous peak in equipment spending could be surpassed by year-end or the first quarter of 1984. The underlying improvements in capacity utilization and demand are reinforcing capital spending. In addition, cash flow has rebounded dramatically, with the Accelerated Cost Recovery program providing an additional boost to corporate profits. Both profits and cash flow have been strong during the past three quarters.

Clearly the nature of capital spending is changing. Capacity utilization rates in many industries do not yet warrant large capital spending programs, but modernization, consolidation of facilities, and increasing efficiency are increasingly important as a share of total spending.

All of the 3.3 percent September rise in new orders for capital goods is attributed to the nondefense sector, continuing the generally upward trend in nondefense orders established early this year. This, too, provides hope for continuing advances in equipment investment.

Given the strong showing of investment through the early stages of the recovery and recent order patterns, the outlook for plant and equipment spending has strengthened somewhat. Investment in equipment will still be the strongest component of overall capital spending, with a roughly 8 percent annualized gain in equipment purchases during the current quarter, resulting in a 3 percent increase for the year over 1982. Further advances of about 8 percent and 6.5 percent in producers' durable equipment spending are anticipated for 1984 and 1985, respectively. In the long run, the outlook for investment depends heavily on a resolution of the deficit problem. If deficits are not reduced, investment spending as a share of GNP will remain below historical levels—in fact, a significant decline in investment could occur in late 1985 or beyond.

Business Finance

John T. Hackett

John T. Hackett
Executive Vice President and
Chief Financial Officer
Cummins Engine Company, Inc.

During the past three months, capital goods producers have finally begun to participate in the current recovery. Athough the pattern of the recovery is uneven and significantly slower than other sectors of the economy, the pace of incoming orders and requests for bids have improved significantly among many capital goods manufacturers.

Continued strength in demand for autos, housing, and consumer durables have played an important part in changing underlying attitudes regarding commitments for capital equipment.

A strong recovery pattern is occurring with producers of trucks, office equipment, truck trailers, and material handling equipment. On the other hand, manufacturers of construction equipment, machine tools, and agricultural equipment have not experienced any significant improvement in demand. They continue to struggle with large inventories of finished equipment, and there is no indication that demand may increase in the near future.

Among machine tool manufacturers, only those who produce equipment that can improve productivity and increase quality have participated in the recovery. There is little demand for traditional machine tools that increase manufacturing capacity. The absence of commitments for heavy construction programs, coupled with large inventories among dealers, has continued to depress production of construction equipment, and the severe summer weather in the Midwest and the PIK program has retarded demand for farm equipment.

Among the capital goods producers that *are* experiencing increased demand, we can expect dramatic changes in quarter-to-quarter performance reports. Efforts to reduce breakeven points and eliminate fixed costs during the recession should result in improvements in reported profits and cash flow, particularly during the early stages of the recovery.

Despite the signs of improvement in manufacturing activity, there continues to be a high degree of uncertainty regarding the sustainability of the current recovery. Managers see dangers in two directions.

The first is the possibility that overstimulation of the economy will result in faster-than-expected increases in demand that trigger cost pressures and substantial needs for external financing for working capital requirements and capacity additions—a return of inflationary expectations and the accompanying problems with labor negotiations and material costs.

The second danger is the possibility that the Federal Reserve will feel compelled to adopt a more restrictive monetary policy as a result of the continued federal deficit. Higher interest rates would quickly reverse the modest recovery among capital goods producers. Therefore, both consumer and capital goods producers have maintained a cautious attitude toward expansion. The recall of workers, increases in working capital, and capital spending programs, are being evaluated carefully to avoid many of the excesses that characterized other recovery periods. There is no question that the recovery is under way, but there is a substantial amount of concern regarding its sustainability.

In addition to the improvement in profit margins, manufacturing companies' net cash flow has improved significantly. Consequently, the demand for external financing is much smaller than is normally experienced during the early stages of recovery. During the early part of 1983, many companies took advantage of a strong demand for equity investments to repair and improve their balance sheets. The vast majority of the proceeds resulting from new equity issues were used to pay corporate debt or retire preferred shares. Most of the refinancing was complete by mid-year, and both equity and debt markets have experienced very light activity during the second half.

If business continues to maintain the current balance between internally generated funds and capital requirements, the long-predicted collision between public and private demands in capital markets can continue to be avoided. But the key to successfully achieving this balance is the pace of the recovery.

During the past recession, there was a significant amount of comment about the long-range outlook for U.S. manufacturing activity. With the recovery under way, there is a temptation to forget those problems and focus on the near-term opportunities. Nevertheless, the problems remain. The competitiveness of U.S. manufacturing firms has been severely weakened, and there is still a strong need for programs to provide transitions from maturing industries to growth industries. Also, the severity of the past recession resulted in a significant loss of financial strength among industrial companies. An economic recovery does not assure that these problems will be solved. Indeed, there are many manufacturers who have yet to participate in the current recovery.

The Personal Sector

Jack W. Lavery

Jack W. Lavery
Chief Economist
Merrill Lynch & Co., Inc.

As the first full year of the recovery ends, it is appropriate to assess the role of the American consumer—the leading player in the upturn to date. By my estimate, the consumer will have made a slightly above average contribution to an about average first year of recovery by the end of the fourth quarter. This view is based on the expectation that growth of real consumer spending in the current quarter will accelerate relative to the 3.5 percent annualized pace in the third quarter. This hypothesis is based on the following factors:

- Personal income is likely to continue to grow at a healthy pace as employment opportunities expand. Moreover, dividend income has begun to benefit from the gains in corporate profits, and interest income has accelerated, reflecting deregulation in the financial services industry.
- Consumer confidence and buying plans remain strong.
- The consumer's debt burden remains manageable. Consumer credit outstanding has edged up slightly, relative to disposable income, from its November, 1982 low point, but remains 2.4 percentage points below the November, 1979 peak of 17.8 percent. The consumer seems to have room to step up purchases with increased borrowing.
- Despite the increase of market rates during the Summer, consumer lending rates have continued to edge downward.
- As a result of tight inventories in the third quarter, the delivery of some durable goods, particularly autos and furniture, was deferred. These deliveries will show up as fourth-quarter sales.
- On balance, the fourth quarter of 1983 should register the strongest Christmas season in five years.

Beyond year-end, the consumer is likely to pull back somewhat. In the first quarter of 1984, income and spending growth may tend to reflect the lagged effects of the Federal Reserve's leaning against nonborrowed reserve growth. I expect that any slowing in growth of disposable income will be accompanied by a comparable moderation in spending, as consumers will be reluctant to let their rate of saving slip further. As the recovery moves into its second year, the consumer will make smaller relative contributions to real growth. The upward pressure on interest rates that I expect to begin early in the second quarter of next year, will push consumer lending rates up, but the overall economic recovery is not likely to encounter dramatic problems because of interest rates until 1985.

Housing and Mortgage Financing Outlook

Robert P. Ulin

Robert P. Ulin
Senior Vice President and
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The housing and mortgage financing industries are entering 1984 at a high rate of activity—only slightly below the peak rate of 1.8 million starts reached in the third quarter of 1983. I expect housing activity to remain close to this rate well through next year. The outlook is much more favorable than it was at a similar stage in recent business cycles. In these past cycles, housing was badly hit when the Federal Reserve tightened credit and interest rates rose sharply. The main impact of a countercyclical monetary policy fell on the housing industry, because there were restrictions on the rate institutions could pay on deposits and, thus, funds for mortgage financing would dry up. However, all this has been changed by deregulation.

The present outlook is very different. In 1984, the problem will not be availability of mortgage financing:

(1) With the new, variable-rate CD's to attract depositors, savings institutions will continue to be active mortgage lenders, aggressively seeking volume to match their deposit inflows;

(2) The burgeoning national market for mortgage-backed securities—that is GNMA or other participation certificates—is another key development. Active trading in these securities offers the institutions originating mortgages a ready opportunity for turnover, so their total mortgage lending is not limited by deposits or capital. Housing has broken out of its old strait jacket. A moderately tighter monetary policy will not disrupt funds for mortgage financing, because savings institutions can bid market rates for their deposits and turn over the mortgages to a wider national market, usually with a positive spread above servicing costs.

In 1984, I expect a total of 1.7 million housing starts, about the same as in 1983; the average size may be somewhat smaller and the proportion of apartments to single homes may be somewhat higher. Nevertheless, the total value of residential construction—including a large volume of renovations and additions to existing housing—will increase from about $130 billion in 1983 to about $150 billion in 1984. (In constant dollars, the change would be 9 percent.)

In recent months, there has been a significant rise in reported prices of new homes and some increase in mortgage rates. Average monthly payments are up sufficiently to raise questions of affordability., However, affordability for the new buyer will be helped by government-subsidized mortgage programs (including continued subsidies by the states), and by the increasing use of variable-rate mortgages at low initial rates.

Builders will also continue to "buy down" mortgages as a way of reducing the cost; and competition is likely to head off any real surge in new-home prices. Overall, housing costs in 1984 will be rising about in line with personal income, which suggests that the recent level of housing starts can be maintained.

Furthermore, apartment building will benefit from the new tax provisions allowing faster depreciation write-offs, as well as the change in personal income tax, reducing the "marriage penalty." For working couples, this reduces the after-tax cost of mortgage payments on small homes or condominium units.

Our 1984 housing forecast assumes that Federal Reserve policy will be only moderately tighter: Interest rates for long-term Treasury bonds will not exceed 12 percent, and will probably average closer to 11.5 percent until late in the year. Assuming a normal spread, the commitment rate for new mortgage loans is likely to stay in the 13.5 to 14 percent range for conventional fixed-rate mortgages.

The Equity Market

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Our policy assumptions in forecasting various areas are as follows:

- The Federal Reserve will continue to walk a tightrope among its nervous constituencies—assuring the bond market of its continuing resolve in fighting inflation, and demonstrating its belief to the Administration and business that a sustained recovery is essential and must be accommodated.
- The Administration will become increasingly demanding of a strong recovery because of the election year.
- Congress will do very little of a substantive nature about the deficit, either in the form of increased taxes or reduced spending.

One year ago, it was relatively easy to forecast a stock market which would continue its strong performance as it moved from the expectation of recovery to the reality. In spite of a remarkably strong move from August to November in 1982, declining bond rates had left the equity risk premium still attractive for stocks.

Today, the situation is much different. The market has advanced 20 percent as measured by the Dow Jones. We have had a period of intense speculation in technology stocks and initial public offerings. While some large corrections of excesses have occurred in the last four months, the broad market averages are close to their all-time highs.

At the same time, the bond market is providing strong competition. The long Treasury market is yielding almost 12 percent. While we have grown used to rates in double digits, it is useful to remember that these are extremely high levels by historical standards. A move to 10 percent would provide a total return of almost 25 percent in 12 months.

Our assumption is that the economic recovery will continue through 1984. As a result, the stock market will have an underpinning of rising earnings. It is, therefore, difficult to construct a case which makes stock prices terribly vulnerable from here. (Individual stocks with earnings disappointments are dealt with mercilessly, however.)

The more difficult question is that of opportunity. Given the stock market's tendency to discount the next six to nine months, it is, presumably, already counting upon a reasonably strong first half of 1984. The question, therefore, becomes: What of the second half of 1984 and beyond?

We are disposed to take the optimistic view that this recovery is sustainable with only moderate interruptions. It will, however, require some help from interest rates. In some ways, we are once again in a situation where we must make some money in the bond market before we can expect real opportunity to develop in the stock market. Therefore, our present asset mix is essentially neutral at 60 percent equities and 40 percent fixed income.